



PROMINES Study

Artisanal Mining in the Democratic Republic of Congo



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Disclaimer

The information presented in this report is done so in good faith with specific reference to the caveats and limitations described in the text. The opinions expressed are those of Pact and not of DFID, the World Bank, or PROMINES. Any errors are the sole responsibility of Pact.

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ACT MINES	Amélioration des Conditions de Travailleurs dans les Mines au Katanga
AGA	AngloGold Ashanti
AMC	Amalgamated Metal Corporation
AMEMNKI	Association des Négociants de Minerais de North Kivu
ANR	Agence National des Renseignements
AODERPRI	Association d'Exploitants Miniers Artisanaux pour la Pacification et Reconstruction de l'Ituri
ARDERI	Association Régionale de Développement Rural Intégré
ASBL	Association Sans But Lucratif (non-profit organization)
ASM	Artisanal and Small-scale Mining
BGR	Bundeanstalt für Geowissenschaften und Rohstoffe
BSR	Business for Social Responsibility
CAMI	Cadastre Minière
CAR	Central African Republic
CASM	Communities and Small Scale Mining
CEEC	Centre d'Evaluation, d'Expertise et de Certification
CENADEP	Centre National d'Appui au Développement et a la Participation Populaire
CIA	US Central Intelligence Agency
CIC	Center on International Cooperation
CIFOR	Center for International Forestry Research
CMKK	Coopérative Minière Maadini Kwa Kilimo
COMAKAT	Coopérative Minières Artisanale de Katanga
COMBEKA	Coopérative Minière de Bien Etre Communautaire de Kalehe
COMESA	Common Market for Eastern and Southern Africa
CommDev	The Oil, Gas and Mining Sustainable Community Development Fund
CMM	Conflict Mitigation and Management office of USAID
CNDP	Congrès National pour la Défense du Peuple
CSR	Corporate Social Responsibility
CTC	Certified Trading Chains
CTCPM	Cellule Technique de Coordination et de Planification Minière
DDI	Diamond Development Initiative
DFID	United Kingdom's Department for International Development
DGI	Direction Générale des Impôts
DGM	Direction Générale de Migration
DGRAD	Direction Générale des Recettes Administratives, Judiciaires, Domaniales et de Participation
DRC	Democratic Republic of the Congo
EICC	Electronics Industry Citizenship Coalition
EITI	Extractive Industries Transparency Initiative
EMAK	Association des Exploitants Miniers et Artisanaux du Katanga
EU	European Union
FARDC	Forces Armées de la République Démocratique du Congo
FDLR	Forces Démocratiques de Libération du Rwanda

FPPM	Fond de Promotion des Petites Mines
FRPI	Forces de Résistance Patriotique de l'Ituri
GECAMINES	Générale des Carrières et des Mines
GESI	Global e-Sustainability Initiative
GI	Garde Industriel
GPS	Global Positioning System
GR	Garde Républicaine
GSSP	Garde Spécial de la Sécurité Présidentielle
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HIV/AIDS	Human immunodeficiency virus/ Acquired immune deficiency syndrome
ICGLR	International Conference on the Great Lakes Region
IFC	International Finance Corporation
ILO	International Labor Organization
IOM	International Organization for Migration
IPIS	International Peace Information Service
iTSCi	ITRI Tin Supply Chain Initiative
ITRI	International Tin Research Institute
IUCN	International Union for the Conservation of Nature
JV	Joint Venture
KPCS	Kimberly Process Certification Scheme
LRA	Lord's Resistance Army
LSE	London School of Economics
LSM	Large-Scale Mining
MDGs	Millennium Development Goals
MIBA	Société Minière de Bakwanga
MiMiKi	IPIS project to map militarized mining areas of the Kivus
MONUC	United Nations Mission in the Democratic Republic of Congo
NDS	La Nouvelle Dynamique Syndicale
NGO	Non-Governmental Organization
NIZA	Netherlands Institute for Southern Africa
NNMS	Ningxia Non-ferrous Metals Smeltery
NOUCO	Nouvel Compagnie
OFIDA	L'Office des Douanes et Accises
OECD	Organisation for Economic Cooperation and Development
OIM	Organisation Internationale pour les Migrations
OKIMO	Office des Mines d'Or de Kilo Moto
OMS	Organisation Mondiale pour la Santé
PAC	Partnership Africa Canada
PAD	Project Appraisal Document
PDG	Président Directeur General
PIR	Police d'Intervention Rapide
PMH	Police des Mines et Hydrocarbures
PNC	Police Nationale Congolaise
PPE	Personal Protective Equipment
RAID	Rights and Accountability in Development

Acronyms

RECOPE	Reinsertion of Artisanal Miner Children into School using Community Child Protection Networks
RWI	Revenue Watch Institute
SAESSCAM	Service d'Assistance et d'Encadrement d'Artisanal et Small Scale Mining
SAKIMA	Société Aurifère du Kivu et Maniema
SGBV	Sexual and Gender-Based Violence
SIPRI	Stockholm International Peace Research Institute
SODIMICO	Société de Développement Industriel et Minier du Congo
SOE	State-Owned Enterprises
SODMIKA	Société Minière du Katanga
STD	Sexually Transmitted Disease
TF Mireca	Task Force Mineral Resources in Central Africa
THAISARCO	Thailand Smelting and Refining Company
TIC	Tantalum-Niobium International Study Centre
TNS	Sangha Tri-National Park landscape
UN	United Nations
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
USA	United States of America
USAID	United States Agency for International Development
USGS	United States Geological Service
VCT	Voluntary Counselling and Testing
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

Overview of artisanal mining in the DRC

The Democratic Republic of Congo (DRC) has enormous mineral wealth and potential including some of the world's major deposits of copper, cobalt, tin, tantalum, gold and diamonds. Given that most large-scale mining activity in the DRC remains in the prospection, exploration, feasibility, or development stages, industrial production has yet to make a major contribution to the country's mineral production in terms of volume. As such, at the current time, the majority of minerals produced and exported from the DRC are still mined, transported, and sold by artisanal and small scale miners, operators and traders.

Artisanal exploitation is defined in the 2002 DRC Mining Code as *“any activity by means of which a person of Congolese nationality carries out extraction and concentration of mineral substances using artisanal tools, methods and processes, within an artisanal exploitation area limited in terms of surface”*.

Governance of the artisanal mining sector

Artisanal mining is legal under the DRC 2002 Mining Code. However, the conditions stated in the law are flouted in virtually every respect therefore the majority of artisanal exploitation is, in fact, occurring outside the law. There are good legislative mechanisms already defined but lack of knowledge of the law; the dearth of technical skills and practical resources to ensure good practices; failure to enforce the law; and the negative impacts of predatory behaviour by certain actors; all contribute to illegal practices in the sector. One of the greatest challenges is the lack of operational Artisanal Mining Zones, the only area where artisanal mining should legally occur.

The DRC government has a technical service for artisanal mining, SAESSCAM, and has defined roles for other state agents in the sector, however there is a major gap between their mandate, their resources and the reality on the ground. The geographic area to be covered, lack of transport, contradictory roles, insufficient technical capacity, and lack of regular payment are just some of the challenges which make it almost impossible for SAESSCAM to do their job under current circumstances. The State Owned Enterprises also have a complex relationship with artisanal mining as they depend heavily on this source of production but without legal terms for such operations, creating conflicts with their industrial mining joint venture partners as artisanal mining should not occur on large-scale mining concessions.

There are many irregularities in the application of tax regimes to artisanal mining and the minerals they produce, including disparities between provinces. Artisanal mining is particularly prone to illegal taxation which places a huge burden on the miners and traders yet, paradoxically, does provide a means of wealth distribution at a community level and fills the gap in payment of many government services. The most extreme cases of illegal taxation include up to 30% 'product share' with certain authorities and 'community labour' to pay security services.

Production and trade of artisanally mined minerals

Determining the number of artisanal miners operating in the DRC is notoriously challenging due to the fact that only a tiny percentage of miners hold their legal Carte de Creuseur. The estimates given in this

report are that there are in the region of 400,000 – 550,000 artisanal miners operating on a regular, seasonal or supplementary basis in the four provinces studied (Orientale, North Kivu, South Kivu and Katanga).

Artisanal mining in the DRC is, at present, carried out inefficiently. Prospection is carried out on the basis of opportunism, history, rumour, luck and superstition. Significant amounts of funds are wasted on inappropriate investments due to lack of geological knowledge, poor advice and desperation. Extraction requires manual labour, using rudimentary techniques and equipment. Resources and effort are wasted and site potential is under-utilized. Lives are put at risk by dangerous practices. However, the mines typically exhibit a well-defined operational hierarchy and certain structures such as cooperatives and associations exist and have the potential to play a far greater role in improved regulation and management.

Once minerals are extracted, they enter a trading system which is heavily weighted in favour of key individuals or cartels, which may be linked to illegal transactions, and generally fails to deliver appropriate benefits to the state in terms of taxes and export revenues. As with the mining activity itself, this is not due to a lack of legislation, rather to a failure to enforce it. Other factors include disincentives in terms of the tax regime which makes illegal trade cheaper and a lack of registered exporters (particularly for gold). With the exception of the up-and-coming copper and cobalt sectors in Katanga, the majority of in-country processing facilities are poor or entirely lacking which means that artisanally mined minerals are not contributing their full potential to national revenues and economic growth.

Security issues in artisanal mining

A wide array of actors, both formal and informal, play roles in the security status of Congolese artisanal mines. The presence and effective functioning of official security providers on artisanal mine sites is essential to preventing and resolving conflicts however competing authorities with their official or self-appointed mandates, as well as outright exploitative and illegal behaviour by some actors, means that many miners face threats, illegal taxation, or obligatory labour. Conflicts also occur between artisanal miners and resident communities, as well as between artisanal miners and industrial mining companies which can have the knock-on effect of deterring international investors.

In North and South Kivu, the presence of armed groups in mining areas creates a complex and dangerous environment for artisanal miners. As the connection between conflict and minerals has been exposed by researchers, lobbyists and the UN Panel of Experts, growing international pressure has led to the US Congress making moves towards introducing legislation which will require all companies to prove that the minerals they purchase, at any point in the supply chain right up to the point of end users, have not come from areas in conflict. The pressure has forced the withdrawal of certain large buyers with an immediate and huge impact on the artisanal mining and trading economy of the Kivus. In response to this situation, a variety of initiatives have been launched to improve traceability and certification of minerals and to promote demilitarization of the mining areas. All of these initiatives face individual and collective challenges and there is a clear need for coordination between them both at policy and ground levels.

Social and environmental impacts of artisanal mining

Artisanal mining is frequently associated with negative social impacts including migration, substance abuse, health problems, prostitution, child labour, gender discrimination and violence. Large numbers of children and youth under the age of 18 years work in the artisanal mining sector in the DRC despite this being prohibited by

Congolese law and UN conventions ratified by the nation. In some mines visited during the course of this Study, up to 40% of the workers on any site could be considered children. The impact of this work on their education, health, welfare, and future opportunities can be devastating. Exclusion from school limits their future choices and opportunities. Heavy labour is particularly damaging to growing bodies and bones, and exposure to minerals, dust, chemical and radioactivity can have an even greater negative impact on children than on adults. The drivers for child labour in the sector vary considerably and there are no simple solutions.

Women have equal right to work in mining under DRC law and the country's constitution, though various provincial and mine level instruments and norms exist which curtail their ability to access equal opportunities. It is rare, to find women digging in the mines unless these are tailings, low grade waste areas, or quarries. Instead, women are more involved in transporting materials and processing the ore. There are also a small but significant number of women working as traders of artisanally mined products. One of the main sources of income for women in and around artisanal mining is the provision of goods and services to the mines. This includes trading in consumable goods, running restaurants, as well as providing sex services. In some artisanal mining areas, there is a high risk for women of being subject to sexual and gender based violence (SGBV).

The combination of male dominated camps, large numbers of young men far from home and family, a rapid daily turnover of cash as well as a lifestyle in which alcohol and drugs figure at a high level, all contribute to prostitution being a major feature of many artisanal mining areas. The high level of promiscuity along with poor, if any, health services and a lack of sanitation and hygiene all contribute to high levels of disease and health problems in the camps. HIV/AIDS awareness is low and prevention tends to rely on superstition rather than behavioural change, condoms, testing, counselling, etc. In some mining areas there are also high numbers of current and demobilized soldiers and this creates another risk factor given the elevated likelihood of HIV/AIDS infection in this group. All of these factors contribute to artisanal mining camps and areas as being potential high-risk sites for increased levels of HIV/AIDS infection as well as likely hubs from which increased rates of infection might disseminate. Despite this risk, there are, as yet, hardly any HIV/AIDS programs in the DRC which focus specifically on prevention within the artisanal mining community.

Other health risks associated with working in and around artisanal mining areas include: occupational health risks; problems associated with treatment of artisanally-mined products including exposure to mercury; mining radioactive minerals; poor hygiene and sanitation standards in the camps leading to gastro-intestinal disease, parasite burdens, etc.; malnutrition due to poor standards of food especially at remote sites; consumption of water and food contaminated with minerals from washing in local water sources, including bio-accumulation of minerals in fish and crops; and liver disease and other organ damage from prolonged and excessive use of alcohol and drugs.

Artisanal mining has major impacts on the environment in the DRC. Trees are cut with abandon around artisanal mining sites in order to provide wood to build camps, to make supports in mining tunnels and shafts, as well as to produce charcoal for fires and cooking. Waste is poorly managed leading to spoil heaps being created around the site. Artisanal mining operations are typically located close to, or are supported by, water bodies. Water sources are not protected and water that should be safeguarded for human consumption is contaminated by mineral washing. Pollutants are introduced to the water and broader environment, notably mercury around gold mines. When the mine is depleted, the miners move to the next site with no effort to rehabilitate the site they have used. Artisanal mining also takes place in protected areas in direct contravention of the Mining Regulations which prohibits the establishment of artisanal mining zones in protected sites.

Artisanal mining as a livelihood and its potential role in poverty alleviation

However, despite this significant array of problems and challenges, artisanal mining is one of the most important livelihoods in the DRC and, from the point of view of the mining sector, has a potentially important role to play in the country's economy and society if practices, regulation and impact could be improved. It is this potential which PROMINES seeks to identify, support and develop. Regulated, safe artisanal mining has a legitimate role to play in a comprehensive and diversified mineral sector in the DRC as it provides a means to exploit 'sub-industrial' resources; it maximizes on labour opportunities in a nationally job-deficient economy; it mitigates the potential negative effects of transitioning to a more robust industrial mine industry; and it ensures community and indigenous ownership and decision-making in resource extraction.

Despite traditional perceptions, many artisanal miners do not fall into the category of being 'the poorest of the poor' but, instead, may earn significantly more than their non-mining rural peers. However due to their spending habits and lack of a savings culture, artisanal miners still end up being poor. The debts acquired by individual miners for tools and other goods can be prohibitively high, reinforcing a cycle of indebtedness and labour in the mines. Economies around mines often suffer price inflation which increases the cost of living, making it difficult for people to survive outside of the mineral economy.

Artisanal mining can be an important component of poverty alleviation strategies in mineral-rich countries, providing a livelihood for many who may not have means of income generation otherwise. There is a growing school of thought which now argues that artisanal mining can, in certain circumstances, provide a better income for miners and supporting a larger community than does large-scale mining. Despite artisanal mining's potential for poverty alleviation, it is risky when it is the sole source of income within a community. However, it is often the case that rural communities with mineral resources rely on mining as the sole economic engine. Given this overreliance on mining, there is a currently unfulfilled potential opportunity to invest income generated from mining into other productive livelihood activities, including mining up-scaling which may contribute towards poverty reduction. When mining income is invested back in to the community, it can become a driver of economic growth for other sectors, such as agriculture, livestock, or health. This requires capacity building of individuals to properly harness these opportunities. However, it can be very difficult to persuade artisanal miners to abandon an activity which, despite being extremely tough, delivers a daily and often quite substantial income, and in which they may have debt or other control-based relationships which create barriers to exit.

Recommendations

This report is based on a contemporary view of artisanal mining and trading in the DRC. Three hundred and forty representatives of the artisanal mining community, mineral traders, government agents, civil society, development and security agencies, local and international NGOs, public security forces, and business operators took part in a comprehensive consultation process which included multi-stakeholder workshops, interviews and mine-site visits. The recommendations which were made in the consultation process were validated by key stakeholders. The report focuses on four provinces: Orientale, North Kivu, South Kivu and Katanga.

The recommendations made in this report respond to the information and opinion gathered in the field in terms of the following objective: *It is the objective of the artisanal mining component of PROMINES to improve the legal status, working practices, and economic return of artisanal mining in the DRC whilst establishing mechanisms to sustainably reduce its negative impacts on society, security and the environment.*

The synthesis of all the recommendations made in the consultation process is as follows:

- Disseminate, implement and ensure observance of the mine law concerning artisanal mining;
- Provide technical training and support for artisanal miners;
- Strengthen the capacity of SAESSCAM to manage the sector ;
- Improve coordination between the state services involved in artisanal mining;
- Clarify and improve relations between the State Owned Enterprises, their Joint Venture partners and artisanal mining;
- Reduce corruption and strengthen artisanal mining tax returns;
- Improve access to markets through transparency and traceability systems;
- Reduce the incidence of child labour in artisanal mining;
- Strengthen the role and security of women in artisanal mining;
- Reduce the impact of environmental degradation by artisanal mining;
- Reduce the incidence of HIV/AIDS and STDs in the artisanal mining community;
- Encourage livelihood diversification in artisanal mining areas;
- Improve security in all artisanal mining areas;
- Identify and formalize artisanal mining zones and ensure access to them;
- Monitor the scale of artisanal mining in the DRC;
- Provide financial services and access to microcredit for artisanal miners;
- Encourage the creation of artisanal mining cooperatives and associations;
- Improve facilities for treatment of artisanally mined materials.

In the report, these recommendations are analyzed, grouped, and inserted into a time-bound plan which is integrated into the larger PROMINES project. Indicative activities, sites and partners are presented in terms of five pilot projects spread across the provinces and five global activities which will be coordinated at a national level as well as being integral to all the pilot projects.

Risks and challenges

In considering how to bring about change in the artisanal mining sector in the DRC, it is important to consider what would be the motivations and incentives for actors to participate in efforts to generate change. Artisanal mining in the DRC is very big business. There is a huge amount of money involved in artisanal mining and trading in the region. It is very easy for traders, companies, authorities at all levels, government services, security agents, and others, including negative forces, to make considerable personal sums of money through control of aspects of the production and trade. Every attempt to change the system to improve transparency and to move

towards regulation will cut some vested interests out. In some cases, these interests will be small and will have little power to fight their removal from the system or they will find new ways and guises in which to re-enter the system to continue to profit. If, however, the actors are powerful and they stand to lose a great deal, they may choose forceful and aggressive ways in which to protect their interests. This may be manifest as efforts to spoil interventions and projects – recognising that it is cheap and easy to stimulate groups of artisanal miners and others to support a popular movement or to participate in demonstrations. It could also involve simply hiring security forces to protect a mine or a trade route. It could be manifest through bribes and incentives for corrupt practices which undermine the projects and interventions. At its most severe, reform could trigger the stimulation or escalation of localised or regional violence and conflict to create a screen under which artisanal mining and trade can continue unchecked.

There is a delicate balance which PROMINES must find and manage. The mining sector of the DRC is just one element of the national governance system, economy, and infrastructure (both the physical and the social infrastructure). The success of PROMINES' artisanal mining interventions will depend heavily on the enabling environment in which they will occur. Every effort must be made to link PROMINES' interventions to the broader process of improved governance, security, investment, growth and human rights, both nationally and in the region. However, whilst being conscious of this context and linking to efforts to improve it, PROMINES must nonetheless stay focussed on its specific objectives in the mining sector in order that realistic steps can be achieved in the time frame available. It is also essential to be realistic about what changes PROMINES can, and cannot, bring about therefore targets must be credible and achievable.

Chapter 1: The PROMINES Artisanal Mining Study



In this chapter:

- 1.1 Background
- 1.2 Project outline and methodology
 - Data collection methods
 - Participation
 - Validation, prioritization and analysis
 - Suggestions and comments from the field
- 1.3 Dissemination of the DRC Mining Code and Regulations
- 1.4 Caveats

1.1 Background

In 2009, the UK Department for International Development (DFID) commissioned Pact Inc, a Washington-based organization for social development, to carry out a study of artisanal mining in the Democratic Republic of Congo (DRC). The purpose of this study was to gather opinion from stakeholders in four geographical areas of the DRC as to what they viewed as the major challenges and areas for potential investment to improve working conditions, economic return, security, social issues and environmental protection in the artisanal mining sector. Coupled with site visits, desk research, discussion and analysis, the Study was designed to bring the voice of the artisanal mining community to the policy and decision making table in Kinshasa.

The Study is part of the PROMINES project of the Government of the DRC, the World Bank, and DFID. PROMINES is an integrated, multi-sectoral program to enhance governance and development in the mining sector of the DRC. It is a technical assistance program with multiple components.

1.2 Project Outline and Methodology

The Terms of Reference for the PROMINES Artisanal Mining Study were:

- To carry out a review of the artisanal mining sector in eastern DRC (Ituri and North or South Kivu) and Katanga Province, highlighting the main challenges and opportunities for reforming the sector as part of a broader strategy to revitalise the mining sector. The review was to include all the main minerals mined by artisans in those regions.
- To recommend to the PROMINES steering committee a set of prioritised short-, medium-, and long-term actions with a view to promoting sustainable economic development in eastern DRC and other

mineral-rich provinces through strategic support to the artisanal mining sector. It was required that the study distinguish targeted actions to be pursued under a specific artisanal mining programme component from broader artisanal mining-related issues and principles that should be addressed or mainstreamed within other components. It was also noted that the study should highlight measures that lie outside the scope of PROMINES and that might be picked up through other initiatives.



Participants at the stakeholder workshop, Bukavu, South Kivu

- Finally, the programme recommendations were to include a draft results framework for the artisanal mining component under PROMINES (including draft indicators for the major actions proposed).

Despite the Terms of Reference requiring the consultants to work only in Ituri District, North or South Kivu, and Katanga, it was considered that the scope of work had to be broadened for practical and political reasons. A visit was made to Kisangani in Tshopo District of Province Orientale as this is the provincial capital and it was essential to make contact with the Provincial authorities if work in Ituri District was to be carried out. Also it was simply not possible to (a) decide between the two Kivu Provinces, and (b) to address the issues and dynamics in one without considering the other. Therefore the consultants advised the PROMINES team in Kinshasa of this enlarged scope of work and received their approval before starting fieldwork. (See Figure 1: Map of Site Visits)

Data collection methods

Fieldwork was carried out as follows:

- Multi-stakeholder workshops were held in the main artisanal mining centres of the agreed provinces. These workshops included participants from government, traders in artisanally-mined products, other businesses including large-scale miners, artisanal miners, non-governmental organizations (NGOs) and civil society. The format of the workshops was consistent in all sites. Each workshop started with a review of the legislation pertaining to artisanal mining and feedback on the appropriateness of the law. Thereafter, working groups were formed



Participants at the stakeholder workshop, Kisangani, Orientale

to address key issues and to make recommendations. The materials used in each workshop are available in Appendix 1.

- Interviews were held with key informants who were identified as having a particular and in-depth perspective on artisanal mining in their area. These were carried out individually and in groups. The questionnaire used for these interviews is included in Appendix 2.
- Site visits were made to artisanal mines and to trading sites. Information was collected by all team members visiting the sites and information was cross-referenced in an effort to identify and remove erroneous responses on sensitive information. The data collection sheet used is given in Appendix 3.

In order to ensure the security of the team and all parties associated with the project, a security plan was developed for the study and shared with PROMINES in advance of carrying out the fieldwork. The plan included guidelines for all field operations and site visits as well as communications protocols. The security plan was accompanied by a risk analysis to determine what challenges the project would face, as well as endeavouring to predict and pre-empt any negative impacts which the research could have given the sensitive nature of artisanal mining and trading. There are many actors profiting from the lack of information, transparency and viable systems.

Figure 1: Map of Site Visits



The field data was complemented by desk research using a range of sources including NGO reports, documents requested from authorities, news items, and others. These materials are referenced, as appropriate, in this report, notably in the Bibliography at the end. As far as possible, only references from the last two to three years have been used. This was a deliberate decision based on the intention to keep this study as contemporary as possible. If required, a more comprehensive bibliography on reports on mineral production and trade in the DRC, along with conflict and development issues, is available in the DFID, USAID and COMESA ‘Trading for Peace’ Study of 2007.¹



Motorcycle convoy off to visit a mine in North Kivu.

Participation

A total of 340 participants were involved in the various stages of consultation, data collection and feedback as shown in Table 1, below.

Table 1: Summary of Study Participants

Province	Multi-stakeholder workshops	Key interviews	Validation & prioritization*	Artisanal mine sites & traders visited
Orientale	45 (Kisangani, Bunia)	25	(0)	Mongbwalu, Iga Barriere, Pluto, Aungbwa
North Kivu	31 (Goma, Butembo)	50	Goma (7)	Goma, Kiboto
South Kivu	40 (Bukavu)	15	Bukavu (11)	Bukavu, Walungu, Twangiza, Nyabibwe
Katanga	119 (Lubumbashi, Likasi, Kolwezi)	15	Kolwezi (42)	Dilala, Kawama

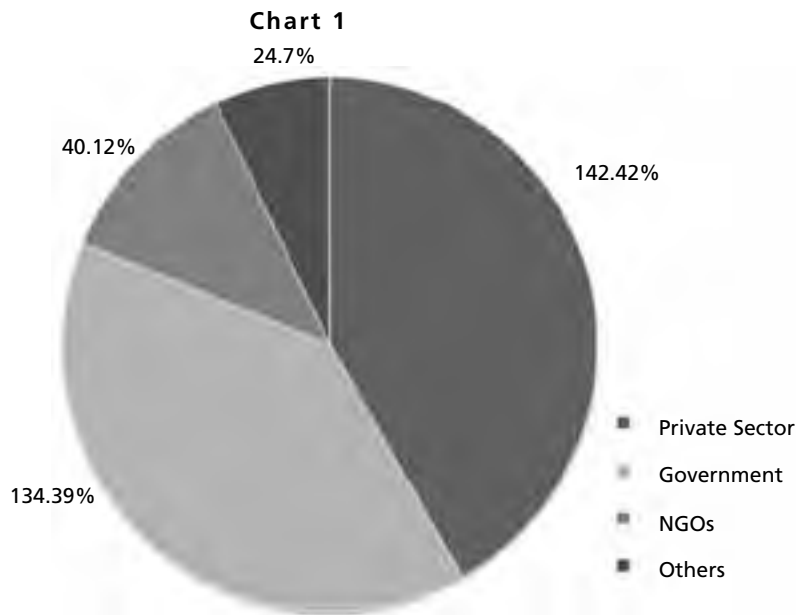
* Participants in the validation and prioritization had already been counted in the workshops and interview.

Participants in the consultation were from the following sectors (shown in Chart 1):

- Private sector (including artisanal miners and traders): 142
- Government: 134
- NGOs: 40
- Other (including media, UN, universities, consultants): 24

Whilst every effort was made to have a gender balance in the fieldwork, the representation of women was still very low. Only 16 women participated however they were from all sectors.

Not all participants gave their age however, of the 243 who did, the average age was 43 (see Chart 2). Whilst children under 18 were regularly interviewed, no one in the mines would admit to being under 18 years of age.



128 Participants advised how long they had worked in artisanal mining (ranging from a few months to over 40 years) with the average being around 8 years (Chart 3).

Validation, Prioritization & Analysis

The recommendations made by participants in the data collection process were reviewed and grouped into a list of key points. This list was discussed with stakeholders in a second round of field visits to ensure that it accu-

Chart 3: Average time in artisanal mining and trading

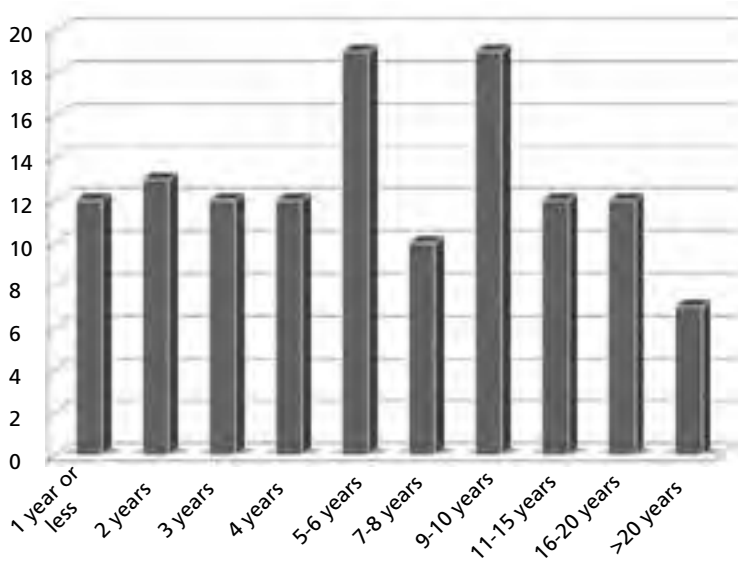
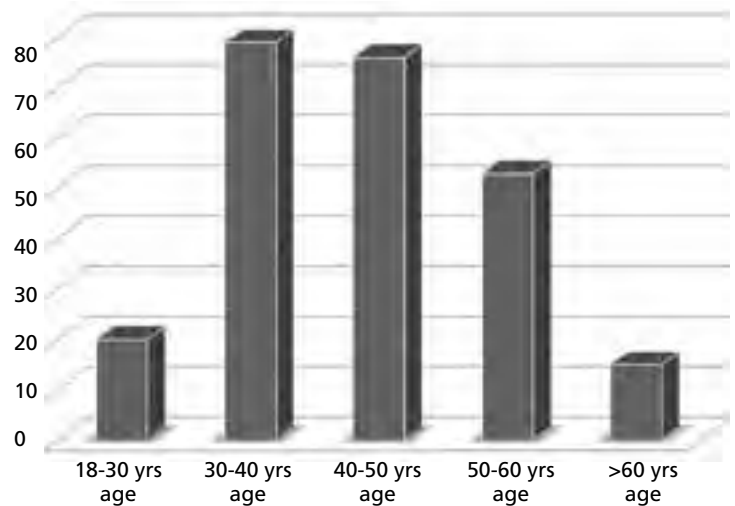


Chart 2: Average age of participants



rately represented the results of the consultation. This was coupled with a process of prioritization in which the recommendations were ranked according to urgency of implementation. The stakeholders involved in the validation and prioritization process were invited as representatives of each of the main sectors involved in the initial consultation.

Using the validated and prioritized recommendations, the consultants applied a technical critique using our previous experience in the field of artisanal mining in the DRC and thereby developed a suite of recommendations which are presented in Chapter 10 along with recommendations for implementation.

Suggestions and comments from the field

At the end of each of Chapters 2 – 9 there is a section entitled “Suggestions and comments from the field”. These sections summarize some of the key thinking and messages which came from the participants and the researchers during the course of the fieldwork. These suggestions and comments are formalized in the recommendations in Chapter 10, however they are included in each chapter as a means of helping the reader formulate the suite of recommendations in relation to the context and realities which we found during our engagement with the artisanal mining community.

1.3 Dissemination of the DRC Mining Code and Regulations

During the fieldwork, a key activity carried out by the team was the dissemination of the artisanal mining legislation in the Mining Code and Regulations. (See Appendix 4). This was carried out for several reasons. First, it was considered that inviting stakeholders to participate in a workshop on artisanal mining regulations, followed by consultation, would assist in mitigating the potential risks associated with the consultation process, notably those of stakeholder fatigue, as well as avoiding an immediate focus on artisanal mining ‘needs’ therefore ensuring that the consultation process did not just produce a ‘shopping list’ and heightened expectations. Second, it was considered that prefacing the discussion process with a workshop on artisanal mining regulations would enable better-informed participation in the consultation process. Finally, by discussing this information it was hoped that local data gathering on other de-facto artisanal mining regulations would be made easier by stimulating artisanal mining actors to share the documents which they use to govern their activities.

This was successful on all counts. As hoped, it gave a focus other than just creation of lists of needs; it provided a communal base of knowledge for all workshop participants to be more informed; and it created a sense of PRO-MINES already making a tangible contribution to actors in the sector.

In each of the eight workshops, the artisanal mining legislation was presented and discussed through two facilitating questions:

- a) Do the existing elements pertaining to artisanal mining in the Mining Code and Regulations support artisanal mining?; and
- b) Which elements of the artisanal mining law require revision and why?

The responses to these questions augment the information given in Tables 3 and 4 on the rules and realities of the Mining Code and Regulations, Chapter 3.



Crossing the Epulu River.

1.4 Caveats

The PROMINES Artisanal Mining Study is not intended as a historical review of artisanal mining, rather as a current snapshot of the situation, actors, dynamics, challenges and aspirations that exist today. This is certainly not to dismiss the past, but to avoid getting trapped in it.

It is impossible to capture all the complexities, opinions, trends and issues of artisanal mining in the DRC in a single document. This Study endeavours to represent a range of situations, concerns, ideas and issues which were heard from interviewees and which were seen in the mines in the four

geographic areas of research. As far as possible, the consultants have tried to provide illustrative examples of problems or interventions, specifically noting where successes have been achieved and identifying the potential to build on them.

The consultants also submit certain caveats in relation to the primary data collected. First, it should be noted that artisanal miners, traders and others involved in the sector are often reluctant to share information for a range of reasons including:

- Their dubious legal status;
- Suspicion as to why they are being asked;
- Reluctance to disclose personal information to strangers;
- Reluctance to let others know what they have that is worth stealing;
- Fear of increased taxation if they become known in formal circles.

Information reported on management and financial issues in the mines was therefore double-checked as far as possible; however, it is presented with the limitation that it should be seen as indicative rather than definitive and what holds true for one mine may not be applicable to another.

Second, information available was inconsistent between provinces and state agencies. It is, therefore, difficult to give accurate statistics or extrapolations on issues such as trade.



Artisanal miners reading the mining code for the first time.

Data should be considered as being the best available from the stated source in that particular area but not necessarily fully accurate or relevant to other areas as procedures, competence, and willingness or ability to collaborate with the research team varied considerably between sites.

Finally, any data which was considered to be particularly sensitive and which may put our informants at risk, or which could create hostilities towards the PROMINES project, has been omitted or handled in such a way that it is non-attributable and provides generic guidance.



Team members carrying out field interviews (Left); Artisanal gold miner reading the mine laws in province Orientale. (Right).

Chapter 2: Introduction to Artisanal Mining in the DRC



In this chapter:

- 2.1 The mineral resources of the DRC
- 2.2 Minerals mined by artisanal miners
- 2.3 The scale of artisanal mining in the study areas
- 2.4 Challenges and opportunities associated with artisanal mining in the DRC
- 2.5 Suggestions and comments from the field

2.1 The mineral resources of the DRC

The Democratic Republic of Congo (DRC) has enormous mineral wealth and potential including some of the world's major deposits: the largest cobalt reserves in the world; the second richest copper region in the world; the largest known diamond reserves globally (25% of the known resources); and the world's largest un-tapped gold deposits. In 2008, the country's share of the world's cobalt production amounted to 45%; industrial diamond, 30%; gem-quality diamond, 6%; and copper, 2%.² (See Table 2).

Table 2: Congolese Mineral Resources³

Province	Minerals
Bandundu	Diamonds, gold
Bas Congo	Bauxite, limestone, phosphates, vanadium, diamond, gold, copper, lead, zinc
Equateur	Iron, copper and associates, gold, diamond
Orientale	Gold, diamond, iron
Kasai Oriental	Diamond, iron, silver, nickel, tin, copper
Kasai Occidental	Diamond, gold, manganese, chrome, nickel
Katanga	Copper, cobalt, germanium, zinc, gold, silver, tantalite, cassiterite, manganese, platinum, palladium, limestone, uranium, coal
North Kivu	Gold, niobium, tantalite, cassiterite, beryl, tungsten, monzanite, platinum, diamond, tourmaline, amethyst, quartz, semi-precious gemstones
South Kivu	Gold, niobium, tantalite, cassiterite, tungsten, platinum, sapphire, tourmaline, amethyst, quartz, semi-precious gemstones
Maniema	Tin, diamonds, cassiterite, coltan, gold

2.2 Minerals mined by artisanal miners

The key minerals being produced by artisanal miners in the Provinces visited are cassiterite, coltan, tungsten, copper, cobalt, gold and diamonds. Minerals which we were told have a history of production or which are believed by actors in the artisanal mining sector to have potential in the future include: semi-precious stones (amethyst, beryl, tourmaline), mica, quartz, iron and platinum. Artisanal quarrying for sand, gravel, and building stone is also significant.

Given that most large-scale mining activity in the DRC remains in the prospection, exploration, feasibility or development stages, industrial production has yet to make a major contribution to the country's mineral production in terms of volume. As such, at the current time, the majority of minerals produced and exported from the DRC are still mined, transported, and sold by artisanal and small scale miners, operators and traders.



Artisanal miner removing cassiterite from a mine, South Kivu.

2.3 The scale of artisanal mining in the study areas

Determining the number of artisanal miners operating in the DRC is notoriously challenging for several reasons: most artisanal miners do not have cards therefore they are not on an official register; many people want to keep the numbers of artisanal miners hidden to avoid clarity on the levels of production they control; many artisanal miners are migratory and move between mines depending on the levels of production that they hear about. Some artisanal miners rely on mining this as their primary subsistence activity, others as an occasional supplement when times are hard or the opportunity arises, still others work in the mines on a seasonal basis and typically reduce their mining during the rains when it is hard to work in the mines and pumps are needed to de-water tunnels.

The other big challenge is how to define an artisanal miner – does this include those involved in processing materials, transporters, etc? For instance, at the cassiterite mine in Bisie, production levels vary from around 8 to 30 tons per day. The mine is very remote and requires a 10 hour walk through the forest to get to the airstrip. The only way to transport ore is manually on people's backs. Moving 30 tons of minerals requires 600 porters, each carrying a 50kg sack for 10 hours and going back the next day. So 1,200 porters alone are needed to ensure this mine functions in peak periods.

Getting an accurate idea of the number of artisanal miners working in any area is extremely difficult. SAESS-CAM's data is inconsistent and limited in terms of: the scope of their physical presence as there are many sites to which they are not deployed; the limits on their logistical resources such as transport and communications; the accuracy of their data collection methods; the lack of registration of artisanal miners; and limitations on data

sharing as this is sensitive information and not always available for public dissemination.

The available published information is of some use but must be analyzed selectively as the variations can be very significant. For example, IPIS reports 2,500 miners in Bisie⁴ while Global Witness reports 15,000 for the same mine⁵. It is these variations which lead to distortions of whatever data is available. Also, as there are so few primary sources of data, one finds circular reference for example: organization A writes a report, which is quoted by organization B; organization C writes a report which quotes organization B; finally organization A writes a new report quoting organization C, but this was actually just organization A's data in the first place.

Also attention tends to focus on the more high-profile mines at the expense of others – for example, the quiet island of Idjwi is estimated to have as many artisanal miners as Bisie⁶ but it is frequently overlooked in reporting.

This study had a mandate to look at artisanal mining in certain areas only, therefore our extrapolated data is limited to just four Provinces (and, within that, only one District of the fourth Province):

- **Katanga Province:** SAESSCAM estimates that there are some 67,000 artisanal miners in the Copperbelt⁷ and around 26,000 active in northern Katanga⁸. These estimates are most likely to represent the main body of the artisanal mining community however there is likely to be a significant % increase if those who work in artisanal mining on a supplementary or seasonal basis are included. The consultants' best estimate was of around 110,000 on a regular basis with a seasonal increase to some 150,000.
- **North and South Kivu Provinces:** Estimating the number of artisanal miners in the Kivus is significantly more difficult than for Katanga. SAESSCAM's presence is patchy, their ability to get to sites is very sporadic, and there are multiple and complex reasons for people wanting to keep the information hidden. The CASM 'Beyond Conflict' report of 2009⁹ quotes 400,000 artisanal miners in North Kivu, South Kivu and Maniema but this was quoting a 2007 report 'Artisanal Mining in the DRC' by CASM which was a desk study for which no original research was done¹⁰. The IPIS mapping has more accurate information but acknowledges its 'blind spots' where it cannot collect information. The consultants' best estimate was of around 200,000-250,000 miners working in the two Provinces on a regular basis with, again, seasonal fluctuations and changes due to internal migration. This figure could go up to 300,000, especially with the current high price of gold.
- **Ituri District, Orientale Province:** Orientale is a very large and diverse Province and this study was restricted to one District only, though a workshop was held with representatives of the government and artisanal mining at the Provincial capital of Kisangani in Tshopo District. Encompassing the mines of Mambasa, OKIMO concessions 40 (AngloGold Ashanti) and 39 (Mwana Africa) as far north as Aru, the Division of Mines in Bunia estimated that there were 60,000 artisanal miners in the District in 2007¹¹. *Association d'Exploitants Miniers Artisanaux pour la Pacification et Reconstruction de l'Ituri* (AODERPRI) quoted 100,000 artisanal miners in Ituri in 2009¹². In interviews during the research, SAESSCAM in Bunia estimated 100,000-150,000 across the District. The figure of 150,000 seems to be high, however with the price of gold stimulating miners to transfer from other minerals (as the consultants were informed by ex-coltan miners now mining gold in Mambasa) as well as stimulating others to start mining, it is entirely possible that the numbers are now reaching these levels.

2.4 Challenges and opportunities associated with artisanal mining in the DRC

Artisanal mining is legal under the DRC 2002 Mining Code. However, the conditions stated in the law are flouted in virtually every respect therefore the majority of artisanal exploitation is, in fact, occurring outside the law.

Artisanal mining in the DRC is inefficient. Prospection is carried out on the basis of opportunism, history, rumour, luck and superstition. Extraction requires manual labour, using rudimentary techniques and equipment, usually with little regard for issues such as health and safety, or environmental impact. Sites are poorly planned, if at all, and mining is inefficient with resources being wasted and site potential being under-utilized. Industrial-grade sites are illegally occupied by artisanal mining groups causing conflicts and deterring foreign investors. Significant amounts of funds, time and effort are wasted on inappropriate investments due to lack of geological knowledge, poor advice and desperation. Once minerals are extracted, they enter a trading system which is heavily weighted in favour of key individuals or cartels, may be illegal, and generally fails to deliver appropriate benefits to the state in terms of taxes and export revenues.

Over and above technical and economic challenges, artisanal mining is frequently associated with negative social impacts including migration, substance abuse, health problems, prostitution, child labour, gender discrimination and violence. Artisanal mining in eastern DRC is also inextricably linked to insecurity as mines are controlled, in varying degrees, by military or militia elements. This leads to conflict, disruption of communities, forced labour, theft, corruption, and violence against individuals as well as providing a source of funds to maintain the rogue security forces in the region.

Given these issues, it is easy to understand why government, donors and non-governmental organizations (NGOs) would want to see artisanal mining reduce and disappear over time. Indeed, many if not most of those involved directly in artisanal mining do so on the basis of economic poverty and, given the choice, would prefer a safer, more decent lifestyle and a different type of livelihood which could deliver a comparable or better level of income.

However, despite this significant array of problems and challenges, artisanal mining is one of the most important livelihoods in the DRC and, from the point of view of the mining sector, has a potentially important role to play in the country's economy and society if practices, regulation and impact could be improved. It is this potential which PROMINES seeks to identify, support and develop.

The revitalization of the mining sector in the DRC does not solely depend on creating a climate for increased



Man cleaning and sorting cassiterite, Bukavu, South Kivu.

industrial mining, rather it requires identifying and developing the frameworks and resources through which all of the DRC's mineral resources can be exploited in a responsible and appropriate manner such that increased benefits reach the poor; that minerals contribute effectively to national growth and stability; that environmental and social risks are minimized and mitigated; and the rights of people impacted by mining are respected.

The opportunities associated with artisanal mining as a legitimate part of the mining sector in the DRC include:



Artisanally mined gold, Orientale.

- **Capturing a broad range of ore opportunities:** Ore bodies vary widely in terms of their scale, depth, mineralization, and grade therefore different strategies and techniques are required if the full spectrum of DRC's minerals are to be exploited efficiently. Large, deep resources need significant investment, based on sound geology, using industrial mining techniques for exploitation. However there are other ore bodies or mineral deposits which also have economic value but do not justify significant investment in major mine plant and equipment. Some ore bodies lend themselves to manual labour if the resource is reasonably accessible but too dispersed for efficient mechanical recovery. Others would require excessive investment in infrastructure to be viable for industrial mining and therefore may be more suitable for a smaller-scale approach. All of these have potential to deliver value to the population and the government if they are effectively and safely exploited through regulated artisanal mining. Looking across the DRC's resources to match the grade and scale of deposits with their appropriate exploitation technique may contribute to overall resource efficiency in the mining sector if its economic and social benefits are properly harnessed and re-allocated.
- **Maximizing on labour opportunities in a nationally job-deficient economy:** As with many manual versus mechanized labour systems, artisanal mining employs far more physical workers than would be the case if heavy machinery is used. One must also consider the vast and complex economic web of 'supply' businesses that cater to the artisanal mining sector. Whilst there are high hopes for the positive impact on employment that the industrial mining sector in the DRC will generate in fact, the direct employment opportunities are relatively limited with peak casual labour levels during mine development and, thereafter, a comparatively limited number of low-skilled jobs available to very specific communities immediately around the mines. Efforts cannot focus solely on creating large-scale mining employment opportunities as job opportunities in the long-run will not respond to current artisanal mining employment estimates.
- **Mitigating the potential negative effects of transitioning to a more robust industrial mine industry:** Building industrial mines, training people, creating jobs, stimulating service industries, and generating an in-direct economy which is sustainable post-mining all take time, resources and considerable, coordinated effort on the part of business, government and donors. In the many years that this will take, mineral exploitation will continue to be a viable livelihood opportunity for hundreds

of thousands, if not millions, of Congolese citizens. The reality is that artisanal mining is not going to stop any time soon therefore efforts are required to regulate and improve this activity in the interim.

- **Ensuring community and indigenous ownership and decision-making in resource extraction:** Artisanal mining is very much about people and resources at the most basic level. There is a sense of disenfranchisement in many communities in which foreign, industrial mining companies operate where it is perceived that the people of the DRC no longer have control of, or access to, their 'own' resources. Artisanal mining is (or can be if well managed) 'the people's mining' and can deliver a greater sense of ownership of, and direct participation in, the mining sector.

2.5 Suggestions and comments from the field

Establish the scale of artisanal mining

No one actually knows how many artisanal miners there are in the DRC. Carrying out a credible census of artisanal mining is directly linked to reforming the system for the issuing of artisanal miners cards. This will be one of the main challenges for PROMINES but will be essential to ensure that a baseline for the project is established.

Produce maps of the artisanal mining areas

Progress has already been made in mapping artisanal mining areas, notably in the work of IPIS and MONUC. This needs to be built upon so that the system is comprehensive, up to date, accessible, and cross referenced. The resources and responsibility to do this must be transferred to the state.

Allocate the right resources to the right type of mining

Much of the conflict between large-scale mining and artisanal miners arises from the frustrations felt about what is perceived to be inequitable and inappropriate land allocations. Artisanal miners want secure, legal access to mineral resources. This message was delivered clearly, forcefully and almost universally in the consultation.



Working conditions in a copper and cobalt mine, Katanga.



In this chapter:

- 3.1 Artisanal mining in the DRC: legal rules vs. practical realities
- 3.2 Key players within the artisanal mining governance structure
 - National and Provincial Administration
 - Ministry of Mines
- 3.3 SAESSCAM
- 3.4 State Owned Enterprises
- 3.5 Suggestions and comments from the field

3.1 Artisanal mining in the DRC: legal rules vs. practical realities

Artisanal exploitation is defined in the 2002 DRC Mining Code as “*any activity by means of which a person of Congolese nationality carries out extraction and concentration of mineral substances using artisanal tools, methods and processes, within an artisanal exploitation area limited in terms of surface*”.

Artisanal mining and small-scale mining and trading in the minerals they produce are recognized under the 2002 DRC Mining Code and the 2003 Mining Regulations as legitimate activities with legal articles determining the authorized actors, practices, locations, etc, which govern their operations. However, the level of awareness, understanding and respect of these legal conditions is extremely low. Table 3 outlines the main articles in the Mining Code which pertain to artisanal mining in comparison to the reality on the ground which was observed during the study.

The provisions of the Mining Code are expanded in the Artisanal Miners Code of Conduct which is provided in Annex V of the Mining Regulations (See Table 4 below)¹³. As with the Mining Code articles, these directives are broken virtually all the time. Reasons are varied but include: some parts of the legislation is not practically applicable, many artisanal miners do not have the requisite technical knowledge to observe (or indeed to read, in French) the regulations; few have the resources or time to meet their obligations; and fewer still have the inclination to do so given that there are no perceived benefits or any enforcement of these clauses.

The penalties which exist for infractions of the Mine Law were not appropriately designed for artisanal mining. For example, under Article 299, any person engaging in illegal mining activities is liable for a fine of between US\$10,000 and US\$250,000. Under Article 302, any person purchasing or selling minerals in contravention of the law will be liable for a fine of US\$10,000 and US\$30,000. The breaches of the law in artisanal mining are so widespread and these penalties are so far beyond the financial resources of those engaged in artisanal mining that the fines are meaningless and do not serve as a deterrent.

In certain areas, the above Code of Conduct is superseded by a local ‘*Foyer Minier*’ or ‘*Statut de Reglements d’Ordre Interieur*’. These documents outline the standards that local authorities have determined should be observed in artisanal mining and may include detailed regulations on the comportment of the miners and the management of the camp. As with the official Code de Conduit, in practice few, if any, of these regulations are observed. The only ones which are generally enforced are those related to the hierarchical management of the mine and fees to be paid. Whilst harmonization of these documents will be necessary at some point in the future, the first step should be to have the most basic and important of the regulations observed, whatever their source, with particular reference to health and safety, protection of water sources, and environmental impact.

Table 3: Artisanal mining in the 2002 DRC Mining Code

Article	Legal Requirement	Reality
Article 5	Authorization for mining and quarry operations: Any person of Congolese nationality is authorized to engage in artisanal exploitation ¹ of mineral substances in the National Territory, provided that he is the holder of an artisanal miner’s card ² , issued or granted by the relevant government entity in accordance with the provisions of the present Code.	The vast majority of artisanal miners do not have their cards. The reasons for this include: failure of the state to issue cards (see Article 11); the cost which varies but should be US\$25; lack of enforcement whereby there is no penalty for those who do not have cards; and lack of incentive to purchase a card as there are no perceived benefits to having one.
Article 10	The Minister has jurisdiction over the creation of artisanal exploitation zones ³ ; the granting and withdrawal of approval for authorized traders ⁴ for the purchase of artisanal exploitation products; and the issuing of authorizations for the processing or transformation of artisanal exploitation products.	Legal artisanal mining should only be carried out in designated zones however there are very few that are operational (see Article 109) despite numerous arêtes designating new zones. The level of engagement at Ministerial level in the issuing of authorizations varies across the provinces as a function of capacity and control.
Article 11	The Governor of the Province has jurisdiction over the issuing of traders’ cards ⁵ for artisanal exploitation products. The Head of the Provincial Mining Division has jurisdiction over the issuing of artisanal miners’ cards.	There are significant delays in issuing cards, if they are issued at all. In many cases, traders can produce their receipt of payment to the DGRAD but do not receive their cards. Reasons for this include: the lack of printed cards; the lack of logistical capacity for the authorities to issue them; the lack of monitoring systems to ensure that traders and miners are operating within the law; and refusal of actors to participate in the system as they prefer to be outside the law. The lack of issue of cards is one of the greatest stumbling blocks to having an accurate idea of the scale and distribution of artisanal mining in DRC.
Article 14	The Directorate of Mines is the only entity authorized to control and inspect small-scale mining exploitation ⁶ and artisanal mining exploitation. It issues its opinion in the event of the opening of an artisanal mining exploitation area.	The Directorate of Mines suffers from a severe lack of technical and logistical capacity to carry out their duties in this respect.

Continued.

Article 26	Eligibility for artisanal mining: Only individuals of age who are Congolese nationals may obtain and hold artisanal miners' cards and traders' cards are eligible to carry out artisanal mining. The following are eligible as authorized traders for mineral substances from artisanal mining:	
	(a) Any individual of age who is a Congolese national;	See Article 27(b).
	(b) Any individual of age and who is a foreign national and has a domicile in the National Territory;	Many individuals who are not Congolese nationals but who are working as artisanal miners were encountered in the study (e.g. Ugandans in Orientale, Rwandans in the Kivus, Zambians in Katanga) though their status in terms of 'domicile' could not be established. It seems reasonable to assume that many are not actually eligible for this activity. The same applied to traders with an even wider variety of nationalities represented.
	(c) Any legal entity incorporated pursuant to Congolese law which has its administrative registered office in the National Territory and whose corporate purpose is the purchase and sale of mineral substances from artisanal mining.	
Article 27	Non-eligible persons : The following are not eligible to apply for and obtain mining and/or quarry rights, artisanal miners' cards, traders' cards, as well as the approval as authorized traders for mineral substances from artisanal mining:	This is a major area of concern and one of the Articles in the law which is most widely flouted.
	(a) Government employees and civil servants, magistrates, members of the Armed Forces, the Police and the Security Services, the employees of public entities which are authorized to carry out mining activities. However, this incompatibility does not affect their ability to participate in the capital of mining companies;	Civil servants and state employees from a wide variety of departments secure benefits (including occasional 'tracas-serie', regular corruption and illegal taxation, forced labour or trade, acting as traders, or mine ownership). One of the main areas of discrepancy is in relation to the employees of State Owned Enterprises which depend heavily on artisanal mining for their production and whose employees openly operate as traders.
	(b) Any individual who does not have legal capacity under the Family Law Code	No examples of this were encountered, primarily due to the fact that so few individuals were interviewed who actually held cards in the first place. Certainly many people and companies are mining and trading who are in violation of the mining and quarry laws.
Article 69	The preparation of the application for the Exploitation Licence : When an applicant submits his application for the Exploitation Licence to the Mining Registry it should include the report on the consultations with the authorities of the local administrative entities and with the representatives of the surrounding communities as well as the plan as to how the project will contribute to the development of the surrounding communities;	Where artisanal or small-scale mining operations occur, arrangements are usually made with the local authorities to permit access to the site. This is typically between the mine owner/investor and the Chief. No examples were found of any consultations and no reports could be produced by any mining authorities. In some cases, social investments are made by mine owners/investors, examples include water points and health services at the Kawama Artisanal Mining Zone in Katanga. However these are the exception rather than the rule. None of these are based on development plans.

Continued.

Article 98	Small-scale mining deposits: If the technical conditions characterizing certain deposits of mineral substances do not allow for a large-scale mining exploitation which is economically viable, but instead for a small-scale mining operation with a minimum of fixed installations using semi-industrial or industrial procedures, these shall be considered small-scale mining deposits. The Mining Regulations determine the conditions for small-scale mining, in particular the volume of the reserves, the level of investment, the production capacity, the number of employees, the annual added value and the degree of mechanization.	Formal small-scale mining has not fulfilled its potential in the DRC, despite being the more acceptable face of high-intensity labour mining and being a credible development target to move artisanal mining into a better framework. During the course of the study, hybrid models which combine artisanal and small-scale mining were seen delivering improved benefits and potential for regulation.
Article 104	Conditions for the granting of the Small-Scale Mining Exploitation Licence: No person can obtain a Small-Scale Mining Exploitation Licence if he does not demonstrate the existence of a deposit whose technical factors do not allow an economically viable industrial exploitation, by submitting a feasibility study together with a technical plan for the development, construction of and exploitation of the mine. In addition to the conditions listed above, any person of foreign nationality must set up a company pursuant to Congolese law in association with one or more persons of Congolese nationality whose participation in the capital of the company cannot be less than 25%.	
Article 109	Creation of an artisanal mining area: If the technical and economic factors which characterize certain deposits of gold, diamonds or any other mineral substance do not make it possible to ensure industrial or semi-industrial exploitation of same, but permits artisanal mining, such deposits are established, within the limits of a determined geographical area, as an artisanal mining area. An artisanal mining area is created pursuant to an order issued by the Minister after he has received the opinion of the Directorate of Mines and of the Governor of the province concerned. A mining Perimeter covered by a valid mining title cannot be transformed into an artisanal mining area. The creation of an artisanal mining area is notified to the Mining Registry which proceeds to insert it in the registry survey map. As long as an artisanal mining area exists, no mining title can be granted over the area, except for an exploration licence applied for by a group of artisanal miners who are working in the area. However, the Geology Directorate may at any time proceed to prospecting and exploration work in the artisanal mining areas.	<p>In Katanga, efforts are being made to establish legal zones however, throughout the country, most of the prospective mining areas have already been granted to industrial mining companies for prospection. In principle, 189 sites have been designated nationally at Ministerial level however these are largely unknown and not operational. Reasons for this include: lack of geological knowledge of the sites; lack of funds to invest in developing the sites; conflicts; inaccessibility; and occupation or control of the sites by other interests.</p> <p>The clause which states that “a mining Perimeter covered by a valid mining title cannot be transformed into an artisanal mining area” creates a number of conflicts:</p> <ul style="list-style-type: none"> • Artisanal mining is regularly carried out on sites granted to LSM and the efforts of the industrial miners to remove artisanal miners often results in conflicts; • Even if a company is willing to work collaboratively with artisanal miners on their site they are effectively prohibited from doing so under this clause • There is no reciprocity to state that parts of LSM perimeters which are found to be unsuitable for industrial mining but which could be suitable for artisanal mining can be legally granted to artisanal miners thus vast tracts of land are obliged to remain unexploited which causes resentment and tensions

Continued.

Article 110	<p>Closure of an artisanal mining area: If the factors which have justified the creation of an artisanal mining area have ceased to exist or if a new deposit which does not lend itself to artisanal mining has just been discovered, on the advice of the Geology Directorate, the Minister proceeds to close the artisanal mining area. The Mining Registry is notified of the closure of an artisanal mining area and informs the Artisanal Miners who are obliged to free the artisanal mining area within sixty days as of the date the notification of the decision to close. The group of artisanal miners working in the artisanal mining area concerned have a priority right to request a Licence for an industrial exploitation or small scale mining. This group has a period of thirty days as of the time of the notification regarding the closure is given by the Mining Registry, to advise if it intends to exercise its priority. The Mining regulations set forth the conditions of access by the group of artisanal miners to industrial mining exploitation or a small-scale mining.</p>	<p>There is no security of tenure for artisanal miners in their zones. Examples already exist of artisanal mining zones which were re-allocated to commercial companies within months of being designated as official artisanal mining zones. Given the lack of any form of technical support, the clauses within this Article which could permit artisanal miners towards small-scale mining are of little use. There are no legal provisions by which the artisanal miners who found/developed the site then have any interest or return from the commercial operators who take over the site.</p>
Article 111	<p>Authorization for artisanal mining: In the artisanal mining areas, only the holders of artisanal miners' cards which are valid for the area concerned are authorized to extract gold, diamonds or any other mineral substance which can be mined artisanally. The artisanal miners' cards are issued by the Head of the provincial division of Mines in the area, to eligible persons who apply for them and undertake to comply with the regulations on protection of the environment, health and safety in the artisanal exploitation areas, in accordance with the terms and conditions set forth in the Mining Regulations. A fixed fee, which amount is determined by the regulations, is charged every time a card is issued. The term of the artisanal miners' card is one year, renewable for the same period of time, without restriction. If the artisanal miners' card is lost, destroyed or stolen, no duplicate will be issued. The holder is obliged to put a stop on it, however, the owner may apply for a new one.</p>	<p>See Articles 5 and 11.</p>
Article 112	<p>Obligations of the holder of the artisanal miners' card: The holder of an artisanal miner's card must comply with the regulations regarding safety, health, use of water and the protection of the environment which apply to his mining activity, in accordance with the regulations in force. He must compensate the farmers for any damage caused by his activity. The Mining Regulations set forth the conditions of execution of the regulations regarding public safety, public health and the environment.</p>	<p>All of these obligations are flouted in the majority of mines. See the section on the Mining Regulations below for details. These obligations are locally superseded by '<i>Reglements d'Ordre Interieur</i>' and other documents which are developed in many mines. See below.</p>

¹ **Artisanal Exploitation:** Any activity by means of which a person of Congolese nationality carries out extraction and concentration of mineral substances using artisanal tools, methods and processes, within an artisanal exploitation area limited in terms of surface area and depth up to a maximum of thirty metres.

² **Artisanal Exploitation Card:** the document authorizing any person of Congolese nationality in whose name it is issued, to extract and concentrate the mineral substances by using artisanal tools, methods and processes pursuant to the provisions of the present Code

³ **Artisanal Exploitation Area:** A geographical area, demarcated on surface and at depth by the Minister, and containing one or more Artisanal Exploitation deposits.

⁴ **Authorized Trader:** Any person authorized to purchase mineral substances extracted by artisanal mining methods from traders or artisanal miners, for the purpose of reselling them locally or exporting them in accordance with the provisions of the present Code;

⁵ **Trader's card:** document issued pursuant to the provisions of the present Code, which authorises the person in whose name it is issued, to buy gold, diamonds or any other substances classified as mines, from persons holding a valid artisanal miners' card, and to resell these substances to authorized traders;

⁶ **Small -scale mining exploitation:** Any activity by means of which a person carries out permanent small-scale exploitation, requiring a minimum amount of fixed installations, by using semi-industrial or industrial processes, after a deposit has been found;



Well-managed mineral sorting operations at the Kawama Artisanal Mining Zone, Katanga.

Table 4: Artisanal mining in the 2003 DRC Mining Regulations

Article	Legal Requirement	Reality
Article 1: Artisanal mining in relation to the owners of concessions or occupants of land or local authorities	<p>The artisanal miner is obliged to:</p> <ul style="list-style-type: none"> a. Conserve the improvements made to the site and land surface by the owners of the concessions or occupants of the land or the local authorities b. Abide by the relevant territorial regulations and legislation including the local customary laws and traditions c. Minimize the impact of their activities on fauna and flora as well as water sources and courses d. Gain access to the area of artisanal exploitation via routes that have minimal environmental impact e. Complete the attached artisanal mining declaration, sign and return two copies to the Provincial Division of Mines who will issue an artisanal miners card and register the miner with the local authorities and administration of the area where he is working 	<ul style="list-style-type: none"> a. Little, if any, consideration of site management and conservation is in evidence around the majority of artisanal mining sites. b. The mass movement of artisanal miners between sites often results in the breakdown of traditional structures and does not encourage respect for customary law. Usually whoever is in charge of the site will make a deal with the chief which is typically beneficial only for the chief and does not consider the broader needs of the community. Many communities are destroyed by the arrival of artisanal miners and, when the mine is depleted, they find their environment destroyed. c. Artisanal mining has significant negative impacts on fauna and flora as well as water sources and courses. d. Artisanal mining routes are typically footpaths or dirt tracks, much material is moved by head-load to the nearest road. Few artisanal mining areas have access roads e. See notes on Mining Code Article 5.
Article 2: Prohibited operations	<p>The artisanal miner card is issued solely for operations that use artisanal methods within specified artisanal zones.</p> <p>The use of the following products is strictly forbidden: (a) explosives; (b) mercury.</p> <p>Elsewhere, all operations for the artisanal treatment of minerals is forbidden unless authorization has been given as per Article 113 of the Mining Code.</p>	<p>As so few artisanal mining zones exist, the vast majority of operations occur outside the specified zones.</p> <p>Explosives are used in many sites and mercury is very widely and indiscriminately used for gold recovery.</p>
Article 3: Deforestation and land management of the artisanal mining zone	<p>The artisanal miner is obliged not to use fire to clear land. The artisanal miner is not permitted to carry out deforestation, to dig up or cut down plants or trees and should bypass them if they present an obstacle to access. The artisanal miner is required to rehabilitate each portion of the artisanal mining zone as work has finished there and not wait until all the mining activity has been finished. The miner must carry out this rehabilitation following these steps:</p> <ul style="list-style-type: none"> a. Restore the land contours to prevent accidents and minimize erosion b. Aerate the soil where it has been compacted c. Replace the topsoil when operations are finished 	<p>None of these environmental regulations are respected. Deforestation is widespread around camps and rehabilitation is rarely, if ever, carried out.</p>

Continued.

Article 4: Procedures for gathering soil and burying waste	The artisanal miner is required to a. Gather the soil and humus into a heap, at a minimum distance of 10m from the mine site, and cover it with a plastic sheet to protect it from wind and rain b. Bury human waste at a depth of 1.5 to 2m, ensuring that the site does not affect underground water systems and is at least 100m from any watercourse	Topsoil is not given special treatment and no efforts are made to safeguard/replace it. There is very little effort made to provide sanitation in camps, no latrines are constructed, and human waste management is usually ad hoc.
Article 5: Protection of prehistoric or historic remains	The artisanal miner is required to suspend all mining activities if prehistoric or historic remains are found in the artisanal mining zone, and must immediately advise the relevant authorities.	The Study did not encounter any instances where this occurred.
Article 6: Maintenance of the camp	The artisanal miner is required to maintain the camp in good order and remove all structures that he has made when the camp is abandoned.	Some camps are maintained in good order and some are dismantled when artisanal miners move on. However this is usually in order to keep the materials for the next camp rather than any effort to restore the environment.
Article 7: Ban on permanent constructions	The artisanal miner is not permitted to make any permanent constructions on site.	The Study did not encounter any instances where this occurred.
Article 8: Noise from mining operations	The artisanal miner is required to carry out noisy mining operations only during daylight in order that the residents of neighbouring areas are not disturbed.	Most artisanal mines operate during daylight hours only due to lack of light to facilitate work as well as to prevent theft of material under-cover of darkness. Some mines work 24 hour shifts but only during 'rush' or highly productive times and with heavy security.
Article 9: Tunnels and crossing water courses	The artisanal miner is required not to make tunnels and not to excavate beyond 30m in depth. He is required to maintain an inclined degree of 15% at to leave horizontal banks of a minimum of 2 metres in depth. The artisanal miner is required to limit crossing water courses.	Many tunnels are longer than 30m though often they follow ore veins and so are winding rather than vertical shafts. Vertical shafts often have galleries or horizontal tunnels leading off them. Some miners do understand the principles of constructing benches and this is seen in many mines though the quality of work varies considerably.
Article 10: Diving operations and restrictions on water pollution	If diving operations are carried out in a water course, the artisanal miner is required to provide appropriate equipment. Before each dive he is required to check on the presence of plant or animal species which are dangerous to humans. The artisanal miner is required to avoid pollution of water resources used in agriculture, livestock rearing or for consumption. The artisanal miner is required not to carry out diving operations, the collection or washing of stones or precious metals in a water course less than 500 metres from its source or to regularly use water required by human or animal populations. The artisanal miner is required not to make excavations and not to wash stones or precious metals at a distance less than 20 metres from a water source.	Divers use a wide range of equipment – some with breathing assistance, some without. Respect for water courses is low in many artisanal mining areas. Minerals are routinely washed in water courses that are also needed for personal washing, cooking and even drinking.

Continued.

Article 11: Indicating the existence of a mine and all accidents or illnesses occurring in the mine	The artisanal miner is required to indicate, with a wooden barrier, the existence of a mine. This structure must be constantly in place to ensure that humans or animals do not accidentally fall in. The artisanal miner is required to immediately inform the local authorities in case of an accident, illness or epidemic in the mine.	Barriers are often erected for security purposes to prevent trespassers and potential thieves. Little effort is made make holes and tunnels safe so that people and animals don't fall in. The remoteness of the mine is a key factor in whether or not the authorities are informed of accidents and illnesses. Communications and reports are often based on rumour. Record keeping is so poor that it was not possible to extrapolate statistics on accidents and illnesses.
Article 12: Training of artisanal miners	The artisanal miner is required to participate in training courses in artisanal mining techniques organised by the special services of the Minister of Mines.	There are no training courses.

Box 1: Initiatives to disseminate the DRC Mining Code to artisanal mining communities

According to Article 225 of the Mining Regulations, the Provincial Division of Mines is responsible for dissemination of the legal texts which pertain to artisanal mining and this should be done in the local languages of the Province. In North Kivu, the Division of Mines has the text in Swahili. There are a range of local and international NGOs which have worked with the Division of Mines to do so in recent years. Examples include:

- In 2008, CENADEP (Centre National d'Appui au Developpement et a la participation Populaire) carried out dissemination of the Mining Code with 200 artisanal diamond miners around in the Tshopo District of Province Orientale. Their brochure to assist with comprehension of the Mining Code includes cartoon illustrations and was produced with the assistance of NDS (La Nouveau Dynamique Syndicale), NIZA (Netherlands Institute for Southern Africa) and the 11.11.11 Project from Belgium.
- In Katanga in 2008 and 2009, the International Labor Organization (ILO) project 'ACT MINES' (Amélioration des Conditions de Travailleurs dans les Mines au Katanga) worked with artisanal mining communities around Likasi to carry out dissemination of the Mining Code with associated technical training on health and safety.
- Also in Katanga, with the support of the USAID Conflict Mitigation and Management (CMM), Pact is working with local partners ARDERI carrying out dissemination of the mining code in the Kolwezi area. Of 267 interviewees at six artisanal mining sites in 2010, only 9% had any degree of knowledge of the Mining Code. This project is using methods such as community theatre, radio emissions, songs, leaflets and other materials to disseminate the code.

As noted in Chapter 1, during the PROMINES Artisanal Mining Study, a key activity carried out by the team was the dissemination of the artisanal mining legislation in the Mining Code and Regulations. Whilst it was recognized by all participants that the Code will not be reviewed until 2012, it was still a useful exercise to start thinking now about any changes that might be needed. The key questions: (a) “do the existing elements pertaining to artisanal mining in the Mining Code and Regulations support artisanal mining?”; and (b) “which elements of the artisanal mining law require revision and why?” were asked of all participants. The responses given by workshop participants to these questions augment the information given in the two tables on the rules and realities of the Mining Code and Regulations. Their comments made included:

- The Mining Code came in after artisanal mining already started and its retrospective application when activity is already underway is very complicated;
- The Mining Code is not harmonized with the Forestry and Land Codes which leads to resource and rights conflicts;
- The process of decentralization commenced after the establishment of the Code therefore aspects of transfer of authority to the provinces have not been included. For example, there is no clear role in the Code for the Provincial Ministry of Mines;
- Coordination and communication between Ministries at the national level often do not take into account provincial realities;
- The Mining Code provides for Artisanal Mining Zones; however, there is a lack of practical knowledge of the value and suitability of sites and no precedents for conversion of titles into Artisanal Mining Zones;
- Huge sites have already been granted to industrial mining companies who control all this land, even if the concession has only a limited number of ore bodies that are suitable for industrial mining. This means that artisanal miners are excluded from large tracts of land which could contain suitable sites for artisanal miners. There is no provision to enable Artisanal Mining Zones to be established on these concessions;
- There is no provision in the law for the State Owned Enterprises to permit artisanal miners to work on their concessions;
- Certain actors who participate in the sector (e.g. small-scale companies carrying out earth movements on artisanal mining zones) do not have defined roles and responsibilities under the law therefore this needs revision.



Artisanal Miner with his valid Carte de Creuseur, Kalehe Territory, South Kivu.

- A revision of the cost of the Carte de Creuseur is required if artisanal miners are to be incentivized to get their cards;
- 30m depth is realistic for alluvial materials but is not deep enough for hard rock minerals.

3.2 Key players within the artisanal mining governance structure

National and Provincial Administration

The President of the Republic has the sole authority to declare minerals as ‘reserved substances’, notably uranium, thorium and all radioactive ores. This is relevant to artisanal mining as, in Katanga, artisanal miners are actively mining radioactive substances.

The Provincial Governor has the responsibility for issuing traders’ cards for artisanal exploitation products.

One of the issues highlighted in the consultation process on the artisanal mining legislation is that the 2002 Mining Code came into force before the process of decentralization commenced; therefore, the role of the Provincial Mining Directorate is not included. This creates national-provincial tensions on a range of issues and also impacts on the operations of national services at provincial level.

Ministry of Mines

There are a range of government services and actors involved in the management of artisanal mining in the DRC. Those described in the Mining Code are shown in Table 5.



Crowds gathered to watch the Mining Code play at an artisanal mining camp in Katanga (Top); Community theater being used to disseminate the Mining Code in Katanga. (Bottom).

Table 5: Roles and responsibilities defined in the Mining Code for the mining services

Ministry of Mines	Role and Responsibilities
National Minister of Mines	Creation of artisanal exploitation zones; Granting and withdrawal of approval for authorized traders for the purchase of artisanal exploitation products; Issuing of authorizations for the processing of artisanally mined products.
Provincial Authority of Mines	Issuing of artisanal miners' cards
The Mining Registry or Cadastre Miner (www.cami.cd)	Registration of artisanal mining zones in the national database; Assuring that mining titles granted to mining companies do not overlap with artisanal mining zones.
The Geology Directorate	Opening and closing down of an artisanal exploitation area
Directorate of Mines	Compiling and publishing statistics and information about the production and sale of products from mines and quarries; Controlling and inspecting small-scale mining exploitation and the artisanal mining exploitation; Receipt and processing the applications for approval of authorized traders; Issuing its opinion in the event of the opening of an artisanal mining exploitation area; Issuing its opinion on the applications for approval of authorized traders for gold, diamonds and other artisanal mining mineral substances.
Department in Charge of the Protection of the Mining Environment	Definition and the implementation of the mining regulations concerning environmental protection with regard to the rules governing artisanal miners.

Further to the above agents and services listed in the Mining Code, Article 14 of the Mining Regulations identifies other technical services within the mining ministry which have specific responsibilities in the artisanal mining sector:

- The Service for Assistance and Organisation of Artisanal and Small-scale Mining - *Service d'Assistance et d'Encadrement d'Artisanal et Small Scale Mining* (SAESSCAM);
- The Technical Unit for Coordination and Planning of Mining – *Cellule Technique de Coordination et de Planification Minière* (CTCPM) (www.miningcongo.cd);
- The Centre for Evaluation, Expertise and Certification - *Centre d'Evaluation, d'Expertise et de Certification* (CEEC) for precious and semi-precious minerals (www.ceec.cd).

SAESSCAM is discussed in detail in section 3.3.

The Centre d'Expertise, Evaluation et Certification (CEEC) was established in 2003 as the government authority for the certification for precious and semi-precious minerals, as well as being the responsible for the implementation of the Kimberly Process Certification Scheme (KPSC) in the DRC. As the vast majority of minerals which the CEEC evaluates and certifies come from artisanal mines, the CEEC has an important role to play in the production and trade of artisanally mined minerals. The objectives of the CEEC are:

- Evaluation of diamonds, gold, coltan and other precious and semi precious minerals;
- Technical support to *comptoirs, négociants* and foundries through monitoring and control of mineral and financial flows;
- Certification and payment of mineral export taxes;
- Training Congolese mineral evaluators;
- Promotion of the exploitation of diamonds, gold, and coltan and other precious and semi-precious substances;
- Improving the price commanded by Congolese precious and semi-precious minerals;
- Fight against fraud.

The *Cellule Technique de Coordination et de Planification Minière* (CTCPM), created in 1978, has the mandate to play a central role in coordinating all the various ministries and organizations which are involved in researching mining exploration, production, treatment, transport and commercialization. The CTCPM is also responsible for circulating information about the sector and managing specific projects within the mining arena. In the artisanal mining sector, the CTCPM has responsibility for:

- Developing and adapting new techniques to improve artisanal mining ;
- Collating all statistics on artisanal mining production;
- Collating and publishing legal and regulatory texts that are issued concerning the artisanal mining sector.

3.3 SAESSCAM

The *Service d'Assistance et Encadrement d'Artisanal et Smallscale Mining* (SAESSCAM), formalized in 2003, is the government authority vested with the responsibility for organizing and supervising the artisanal mining sector. SAESSCAM's participation in the study was of paramount importance and their representatives participated in workshops, interviews, site visits and the feedback process, as well as providing information on artisanal mining in their respective areas and nationally.

SAESSCAM's objectives are:

- To promote the emergence of a middle class in the artisanal and small-scale mining sector, ensuring the training and technical assistance need to reinforce the capacity of those engaged in the sector;
- To monitor the flow of materials produced by artisanal and small-scale mining from the mine to the point of sale, assuring that these minerals pass through the official chain of commercialization;
- To ensure that the correct taxes from artisanal mining are collected for the state;
- To support the creation of artisanal mining cooperatives;
- To encourage artisanal and small-scale miners to operate according to the Mining Code and Regulations;

- To contribute to the wellbeing of local communities impacted by artisanal and small-scale mining;
- To work in collaboration with the public administration and other services of the Mining Ministry in the design, production and acquisition of appropriate equipment for artisanal and small-scale miners to improve the quality and quantity of their production;
- To disseminate guidance on security at artisanal mining sites and to ensure this is observed;
- To assure the integration of women in the artisanal and small-scale mining sector;
- To encourage artisanal and small-scale miners to invest in other economic sectors; and
- To participate in the creation of credit sources and funds to promote artisanal and small-scale mining.

SAESSCAM has 613 staff officially registered. It is structured through various management and thematic committees and functions (coordination, technical services, integrated development, and finance/administration) which are centralized in Kinshasa. SAESSCAM's presence throughout the country is detailed in the table below:

Table 6: SAESSCAM's countrywide presence

Province	Anntene/Siège	Bureaux	No.
Bandundu	Tembo	Mawangu; Panzi; Kibenga; Kasongo-Lunda; Bandundu	34
Bas Congo	Matadi	Tshela; Luozi-Songololo	11
Equateur	Gbadolite	Kotakoli; Gemena; Ikela; Mbandaka; Yakoma	34
Kasaï Occidentale	Kananga	Kamonia; Luebo; Kazumba; Dimbelenge; Luiza	17
Kasaï Orientale	Mbuji Mayi	Mwene Ditu; Lubao; Lubefu; Lusambo; Kabinda	8
Katanga	Lubumbashi	Lubumbashi; Kolwezi; Likasi; Manono; Kalemie; Kasanji; Mitwaba; Lwisha; Kipushi	209
Kinshasa	Kinshasa	Kinshasa	52
Maniema	Kindu	Punia; Lubatu; Kailo; Pang; Kabambare; Kampene; Kalima; Kasese; Kama	82
North Kivu	Goma	Beni; Lubero; Mangurejipa; Walikale; Butembo	50
Orientale	Kisangani	Banalia; Ubundu; Isiro; Buta; Bondo; Bunia	18
South Kivu	Bukavu	Fizi; Mwenga; Idjwi; Kalehe; Shabunda; Walungu	98

During the course of the Study, various negative or sceptical opinions were expressed about SAESSCAM's ability to do its job, including:

- SAESSCAM is non-functional in a technical sense therefore its role should be transferred to other agencies;
- SAESSCAM agents are individually corrupt leading to entrenched corruption throughout the service. The only way to remove this corruption is to disband the service;
- SAESSCAM should be privatised in order to gain control of its activities, motivate its staff, and function efficiently;
- SAESSCAM should be decentralized fully in order that provincial offices have autonomy over their actions.



SAESSCAM agent at a mine site in Katanga.

However, in general, the voices in favour of retaining, retraining, restructuring and improving SAESSCAM were far stronger than those that proposed disbanding or privatising the service.

The challenges facing the Service are enormous:

- The geographic area that they are required to cover is vast and access to many remote sites is extremely difficult (e.g. for the agents from Butembo to get to a key mining area at Etaetu requires 98km by motorbike and 70km on foot);
- Many SAESSCAM offices have few, if any, vehicles and even those that do have motorbikes may lack the funds to operate and maintain them. In Kisangani, due to lack of any transport, SAESSCAM agents end up waiting for *creuseurs* to arrive at the *comptoirs* where they levy a tax instead of going out to the field to help them with technical issues;
- The number of agents officially employed by the Service is insufficient to cover all the sites which, in some sites, results in a secondary system of unofficial agents being deployed who are not SAESSCAM staff but have an informal mandate to help the Service to collect taxes and, at the same time, to pay themselves;
- The agents have multiple roles to play, some of which are contradictory. Their main functions can be divided into two categories: (a) technical assistance, and (b) tax collection. In most, if not all, cases, the role of tax collection takes precedence.
- The professional and logistical capacity of many SAESSCAM agents to act as technical advisors is limited. They lack equipment, knowledge and authority, and there may be little respect from the artisanal miners themselves for SAESSCAM in this 'expert' role;
- There are conflicts between SAESSCAM and other actors on various sites (which may include mine owners, cooperatives or associations, representatives of other mining services, security personnel, etc.).

These arise primarily in relation to issues of finance and control of the sites, particularly as SAESSCAM is a relatively new entrant to the artisanal mining arena in many areas and their arrival may disrupt existing vested interests;

- In Bukavu, the staff has not been paid for 10 months, in Butembo it is 14 months. It is difficult to imagine that people tasked with tax collection can be motivated to do so totally honestly when they are not being paid a salary. Added to this, there is a parallel system of official and non official SAESSCAM agents in place. The number of agents 'known' to Kinshasa is typically much lower than those cited as staff at provincial level. This system of supplementary 'staff' is used to try to extend the service's footprint on the ground however it also causes significant confusion as these are, in effect, unofficial actors collecting state taxes.

The ways in which various offices respond to these challenges vary considerably. In some cases, lack of resources and the difficulties of operating have given rise to lethargy and indifference. In some cases, there is little effort to hide corrupt activities with an open acknowledgement that agents are supposed to just pay themselves from the taxes they collect. There are SAESSCAM agents who act as traders (despite this being illegal).

However, in other cases and offices, there are also dynamic staff who take their work seriously and, with support, resources and improved organization, could move forward far beyond their present level of effectiveness. Some SAESSCAM offices are increasingly well organized with vehicles, computers and systems in place. For example:

- The Kolwezi office has received training, improved its resources, expanded its activities and is actively working on improving extraction techniques, and manages a system of '*guichet unique*' to co-ordinate tax collection between the different services in the mines. This is a system whereby a single state agency, in this case SAESSCAM, collects multiple taxes through the 'one-stop-shop' principle, and that agency is then responsible for allocating the received tax between all the other relevant services. This office works in partnership with international and local NGOs, has benefitted from training on a wide range of issues including conflict resolution, and child labour, and has received support from donors such as USAID (through Pact).
- The Goma office has a strong capacity and willingness to engage in monitoring artisanal mining in the province and has forged links with international partners who may be willing to provide equipment and training to help them play an active role in the new traceability and monitoring initiatives in the east.

The information available within parts of the SAESSCAM system is also very interesting and, with coordination, could be elaborated into a very useful data set for monitoring. For example, the SAESSCAM offices have lists of all the mines where their agents are present and the numbers of miners working at each site. The SAESSCAM national office has commenced a mapping process and has purchased 98 Garmin GPS units to distribute to the field to improve data collection, thereby to create a national database and map of artisanal mining.

3.4 State Owned Enterprises

Other key government actors in the artisanal mining sector in the DRC are the State-Owned Enterprises (SOEs) such as *Générale des Carrières et des Mines* (Gecamines), *Office des Mines d'Or de Kilo Moto* (OKIMO), *Societe Miniere de Bakwanga* (MIBA), *Societe de Developpement Industriel et Minier du Congo* (Sodimico) and *Societe*

Aurifere du Kivu et Maniema (Sakima). There is no role defined for the state owned enterprises in the Mining Code or Regulations.

Typically, these SOEs rely heavily on artisanal miners, creating arrangements whereby artisanal miners can work on their concessions and purchasing their material. These arrangements can be casual purchases, informal site sharing, or highly formalized relationships through signed contracts. The SOEs establish a ‘product sharing’ arrangement whereby the artisanal miners must give a percentage of their material to the company’s agents each day.

In the case of the gold enterprise, OKIMO, in Province Orientale, for example, the details of the arrangements are set out in the *Reglement d’Ordre Interieur de l’OKIMO - Regissant l’Exploitation Artisanale d’Or* (1998). Under this arrangement, OKIMO issues contracts to sub-contractors (*Chefs de Sous Traitants*) to manage the artisanal mining workings and to collect a 30% share of all gold produced on the site.

There are variations on the system even within one SOE. In the 1980s, when artisanal mining was liberalized by Mobutu, OKIMO started two forms of manual mineral extraction. The first was ‘*orpaillage*’ (artisanal gold mining) in tailings, the second was ‘*tacheronage*’ in underground mines. In the *tacheronage* system, OKIMO workers entered the abandoned underground mines and removed materials to wash. They gave 70% of the material to OKIMO and kept 30%. This was a shift arrangement so a worker would spend half the day in *tacheronage*, and half the day doing his normal job for OKIMO. This was, effectively, one way in which the company paid its workers. This system carried on until around 1995 when most of the mines became inaccessible and the system became uncontrollable. The majority of OKIMO’s income from then on relied on *orpaillage* through the *Chefs de Sous Traitants*. Just a few sites continued with *tacheronage* under the name ‘*mines de petite echelle*’. The pits which were used by OKIMO right up to the latter half of 2009 were the last of these ‘small-scale’ mines. These mines were exploited by a mixture of OKIMO workers and independent artisanal miners, under the management of OKIMO. OKIMO took 60% of the sand/raw material and the diggers kept 40%. OKIMO is now working with SAESSCAM and the Governor of the Province to develop new regulations and structures to govern how gold is mined and traded on the OKIMO concessions.

OKIMO is just one example. In 2000, the Governor of the Province of Katanga issued an *Arrêté*¹⁵ mandating *Gécamines* to establish a *Nouvel Compagnie* (NOUCO) in charge of buying and processing the raw minerals produced by artisanal exploitation. NOUCO was to cooperate with the artisanal mining association, *Association des Exploitants Miniers et Artisans du Katanga* (EMAK). EMAK took on the role of stocking, transporting, and selling its members’ products to NOUCO. This structure and arrangement was a business failure which resulted in *Gécamines* owing significant amounts of money to EMAK and the miners¹⁶. This continues to be a source of conflict and on 9th of April 2009, a group of *négociants* demonstrated in front of the town hall in Kolwezi to demand the payment of the outstanding debt of \$10 million by *Gécamines*¹⁷.

In another, current, iteration of the relationship, *Gécamines* issues contracts to small-scale mining companies to run gangs of artisanal miners for “hand-picking” of minerals on *Gécamines*’ concessions, in some cases even granting them conflicting licenses on sites for which they had already agreed contracts with large-scale joint venture partners.

In principle, *Gécamines* does not buy minerals directly from the artisanal miners, but instead it deals with traders. The traders work at mining sites that have been assigned to them by *Gécamines*. To dig for the minerals they

engage artisanal workers who can only sell their products within the limits of the mining site that is owned by Gécamines. They cannot leave for other markets to try to seek a better price¹⁸.

On Gécamines sites where artisanal miners work, there is a 'product sharing' arrangement in place in which the miners are obliged to give a percentage of their production to Gécamines.

Retrenched workers from Gécamines, with few other employment options, are also heavily involved in artisanal mining in Katanga.

There are close relationships, buying arrangements, and obligatory 'share of production' between other SOEs and artisanal miners on many sites. This arrangement poses several challenges:

- There is no provision for this relationship within the mine law. In principle, artisanal mining can only be carried out in designated artisanal mining zones by eligible individuals holding artisanal mining cards. Artisanal miners working on state-owned concessions do not fulfil these criteria therefore the state itself is acting in contravention of the new law;
- The contractual arrangements such as the *Reglements d'Order Interieur* pre-date the Mining Code. Some actors use this to argue that they should be abandoned; others consider that their omission from the Mining Code was an error which needs to be corrected. Their application is selective (e.g. the 30% is still collected even new contracts are not issued) and usually in favor of the state and to the detriment of the artisanal miners;
- The SOEs are in joint venture (JV) partnerships with industrial mining companies. According to the mine law, artisanal mining cannot occur on sites which have been granted to industrial mining companies for exploration or exploitation. The fact that the companies' state partner is actively supporting and profiting from artisanal mining creates significant problems and legal contradictions for the industrial mining companies. In Katanga, many mining companies are struggling to find a way to remove artisanal miners from their sites while, at the same time Gécamines is purchasing their material. In Orientale, OKIMO have opened a gold trading counter for artisanal miners a matter of a few hundred metres from the entrance gate to AngloGold Ashanti's camp;
- The SOEs are often late in making payments to the artisanal miners and traders from whom they purchase materials which can lead to resentments which boil over into conflicts as has frequently been seen in Katanga.

In Orientale, the Provincial Governor started negotiations with SAESSCAM and OKIMO in 2008 to create a new mechanism for management of artisanal mining on the OKIMO concessions. Initiatives such as this need to work within the national, legal framework rather than creating parallel systems.

Fundamental consideration needs to be given as to how the state, through its enterprises, works with artisanal miners. Artisanal mining was liberalized under Mobutu's regime in 1983 but new legislation was enacted by the government around twenty years later, in 2002, to control and regulate the activity. The SOEs still operate under the old system and outside the new legal framework. This is not to suggest that the state owned enterprises should not work with artisanal miners but there should be a conscious move to ensure that it fits within the Congolese legal context.

Box 2: Articles from the OKIMO *Reglements d'Order Interieur* governing artisanal mining

- Article 4: OKIMO can, at any time, cancel the authorization for artisanal mining on any site which is found to have industrial potential. In this case, OKIMO can take back the site for industrial exploitation. OKIMO will give another site to the *Sous Traitant* to fulfill his right to mine.
- Article 20: Each *Sous Traitant* must pay 30% of the production from the site to OKIMO.
- Article 24: Authorization to prospect for gold is granted on payment of five *kitcheles*¹⁴ of gold. The permit is valid for 30 days and renewable three times.
- Article 33: Before occupying the land that has been granted to him, each Mine Chief (*Chef de Chantier*) must pay the *Sous Traitant* five *kitcheles* of gold of which 50% goes to the account of the local authorities (*Collectivité*) instead of to OKIMO. The *Collectivités* return these royalties to the traditional communities who hold the land rights of the ground that is fully or partially given over to artisanal exploitation. (Also recorded in Article 37)
- Article 36: In order to fulfil his obligations, the *Sous Traitant* keeps 10% of the royalties received from the *Chefs de Chantier*.
- Article 37 (3): The *Délégué des Sous Traitants*, as remuneration for his role, receives 5% of the royalties sent to the account of OKIMO by the *Sous Traitants*.
- Article 41 (a): Each site will have a depot for sand/gravel supervised by the *Sous Traitant* into which the 30% of the material due as royalties to OKIMO is stored. The material due to OKIMO is processed in the presence of the *Sous Traitant* and the *Chef de Chantier*. The production is to be weighed, sealed, and returned to the *Sous Traitant* who submits it to OKIMO without delay.
- Article 41 (b): The owners or operators of motor pumps pay the *Chef de Chantier* or *Sous Traitant*, on behalf of OKIMO, 20% of their income, which is recorded in a special register.

3.5 Suggestions and comments from the field

Disseminate and enforce the artisanal mining law

In all discussions it was clear that the artisanal mining sector is not in want or need of yet more regulation. What is needed, however, is a realistic plan which can help the sector (a) address some of the fundamental disparities which exist over mineral access and rights; (b) review the (relatively few) clauses which pertain to technical aspects of mining that need changing; (c) disseminate the documents in local languages and appropriate media as an essential step towards promoting knowledge, understanding and respect of the law; and (d) enabling the actors involved in implementing, monitoring and enforcing the law

Clarify and streamline roles and responsibilities

One of the problems with the current governance structure is that even though roles and responsibilities are defined in legal texts, the application of these texts at ground level is very poor. As a result, both duplication and gaps occur. Whilst all agents are keen to participate in formal and informal tax collection duties, few have the resources or motivation to fulfil the technical roles of licensing, inspection, training and other support. One of the steps recommended to address this hurdle is to produce simple, clear, materials in local languages which describe the official roles and responsibilities of the actors who are authorised to be present in artisanal mining areas. This information needs to be disseminated at all mining sites and should be done in conjunction with the steps to address tax fraud described in Chapter 7.

Increase the uptake of artisanal mining cards

Few artisanal miners actually have a valid *Carte de Creuser*. Improving the system for issuing cards for miners would deliver several benefits:

- It would be an important step towards a first census of the number of people involved in artisanal mining and trading in the DRC and a baseline for a monitoring system;
- It would contribute to changing peoples' mindset towards recognising that artisanal mining is governed by law and regulations;
- Issuing the cards would create an opportunity to impart other information to the artisanal miners about their responsibilities, etc;
- It would generate some traceable revenues which could be used to reinvest in the sector.

To this end, consideration should be given to two key steps in relation to the artisanal miner card. First, the price is currently prohibitive therefore to get the process started, the cards should be issued with only a very low charge to stimulate uptake and to bypass the complaint that people cannot afford them. Second, consideration should be given to transferring the responsibility for issuing artisanal mining cards to SAESSCAM and they should have the resources and capacity to issue the cards at site. The current dependence on the Division of Mines issuing them in the nearest town is impractical.

Reduce delays in the licensing process

Problems are also posed by the significant delays which many actors experience in obtaining their cards and licences. This applies primarily to traders as the vast majority of artisanal miners do not even start the process of application for their card. Traders in all provinces complained of significant delays in obtaining their cards and often only have their official DGRAD (*Direction Générale des Recettes Administratives, Judiciaires, Domaniales et de Participation*) receipt as proof of payment. In some cases, they receive 'receipts' from the authorities which have no amount written on them. Many actors considered this to be a significant problem and urged the authorities to find ways to resolve it.

Strengthen SAESSCAM

As noted in section 3.3, whilst there were many criticisms of SAESSCAM there was a stronger wave of feeling that it is an essential service which required restructuring and capacity rather than replacement. Restructuring will have to be a very comprehensive process, everyone recognises that this is not a question of vehicles and training, rather of complete overhaul of the service at national and local level.

Clarify relations between the SOEs, their JV partners, and artisanal miners

The current situation on the ground is confusing, contradictory and lacking in transparency. Companies investing in the DRC struggle to understand how their state partners can be involved in an activity which does not fit within the legal framework in which they themselves are required to operate. Artisanal miners are unclear as to what laws apply – one day they are working as usual and selling material to the state, the next they are told they have no legal right to be on the concession and they are being cleared off by the state security forces. The state takes a significant percentage of their production but the amount far exceeds official export figures. Many questions were raised by stakeholders in the field and there is a clear need to make this complex relationship more transparent, conforming to the new mine law.

Chapter 4: Artisanal Mining Operations



In this chapter:

- 4.1 Artisanal Mining Cards
- 4.2 Working conditions in the mines
- 4.3 Roles and management structures in artisanal mining
- 4.4 Associations and cooperatives
- 4.5 Artisanal Mining Zones
- 4.6 Transformation of artisanally-mined minerals
- 4.7 Suggestions and comments from the field

4.1 Artisanal Mining Cards

Before commencing work, artisanal miners should receive training from SAESSCAM in respect of the Mining Code, the Code of Conduct, environmental responsibility, techniques, safety and hygiene. The training should be based on an evaluation test carried out by SAESSCAM with the results sent to the Head of the Provincial Division of Mines. The artisanal miners should receive a certificate at the end of the training which allows them to apply for their artisanal mining card. All of this is detailed in Mining Regulations Articles 232-233.

The process of obtaining an Artisanal Mining Card is described in the Mining Regulations Articles 224-231. An application form must be completed, detailing:

- The name, address and contact details of the applicant;
- The artisanal mining zone where they will work and the minerals they will mine;
- Their commitment to respect the Artisanal Mining Code of Conduct
- If an Artisanal Mining Card has ever been withdrawn and, if so, if the applicant has undertaken a training course since that time;
- Whether or not the applicant intends to process the minerals they produce.

The signed application is submitted along with a copy of their identity card; a signed declaration; a copy of the ministerial authorisation for mineral processing (if relevant); the previous Card if the application is for a renewal; and two passport photographs. The application should be processed by the Provincial Division of Mines within 20 days of the application being made.



Rudimentary lighting for underground workers.

Some of the challenges associated with this process include: the miners are often working on remote sites and can/will not leave to go to the Division of Mines to submit their application and subsequently collect their Card; most miners do not work in formal artisanal mining zones; miners may be unable to get photographs; most miners see no benefit in paying for the Card and there are no penalties if they do not.

The amount charged for the card varies. In principle, it is US\$25 for everyone. One senior official in the *Division des Mines* told us it was \$10. At one mine in Orientale, seven artisanal miners out of approximately 200 had artisanal mining cards however these were out of date and they had paid \$2 for them. One mine manager told us he just had to have one US\$25 card to cover the several hundred miners on his site. However, at the cassiterite mine of Nyabibwe in South Kivu, some 150 miners out of ap-

proximately 800 had legal, valid cards available to show us. One cooperative in North Kivu told us they had paid \$100 into the bank to get cards for their 10 members but they have never received them.

4.2 Working conditions in the mines

Artisanal mining in the DRC is, by and large, done poorly. A key observation based on the visits to mine sites and engagement with artisanal mining actors is the lack of efficiency in the production of minerals. However it should be noted that appropriate technology and innovation by artisanal miners to adapt to local mine contexts is abundant. Support to improving basic technology would most likely be met with enthusiasm and local ownership.

In the prospection and mine development phase, significant effort and investment is wasted in digging non-productive holes which are then abandoned. The lack of geological information and business planning to inform mine development decisions are major contributors to the debt which permeates the whole artisanal mining sector. Production is often as a result of luck and opportunism rather than judgment or sound planning. Whilst many actors demand 'access to finance and credit' as the solution to this problem it is not, in fact, a credible solution as the issue is not the source of funds rather the viability of the enterprise and the technical support required to enhance efficiency.

Once a mine is identified, the lack of appropriate tools and techniques means that the level of labour invested in mining and processing minerals is also inefficient. In some instances, artisanal mining actors are endeavouring to adapt decrepit, abandoned, inappropriate equipment for use in their work. During the course of the field work for this study, examples of this inappropriate equipment which were seen included:

- Artisanal miners re-laying broken rail tracks to push an old mining wagon 50m to dump material they were digging out from the base of a massive landslide in an old mine pit;
- Artisanal miners, under the advice of SAESSCAM, planning to re-build an old gold processing unit despite lacking the necessary materials, the skills to use the machine, or even a viable water source.

Waste management of overburden or low-grade material is often unplanned resulting in the creation of unstable slag heaps which may be on top of potential ore bodies or which may collapse and refill the mine. Such practices are, again, a significant waste of effort and investment as well as being dangerous.

Some mines have varying degrees of mechanization for specific tasks. Pumps, either to remove water or introduce air to tunnels are often used. Typically they will be owned and operated by a businessman on the site and rented out on an hourly or daily basis to the PDG (*Président Directeur General*) of the mine. In some cases, crushing machines are available though in mostly the crushing of rock is done using heavy metal tools, either hitting loose material or in a 'mortar and pestle' arrangement. Sorting of material is done by hand using sieves, metallic mesh, flat dishes with a 'winnowing' approach, sluice boxes, or, in rare cases, basic mechanized jigs.

Digging is largely done by hand with picks, shovels and buckets. In some cases, water jets are used to wash away the material but we saw very few examples of mechanized extraction. At the artisanal mining zone at Kawama in the DRC, a hybrid approach is in operation combining mechanized removal of the overburden and the low grade material ('*decouverte*') with traditional artisanal mining on the cleared surface. In this site, the artisanal miners are permitted to carry out their usual techniques to a specified depth. When this is reached the machinery is put back on the mine to remove the waste and to level the site again. The company which provides this service takes the waste for mechanized recovery (this is low grade, under 1.5-2% cobalt which is too difficult for the artisanal miners to process) as well as having the option of buying the miners' regular production at local market price.

In almost all the mines visited in the Study, poor standards were observed in terms of personal security and working practices:

- Tunnels far deeper than the regulated 30m are often being dug (up to 140m seen at some sites) and often these lack any form of structural support. Even if rudimentary supports are put in place they are rarely strong enough, are poorly designed and constructed. Ventilation systems are rarely put in place and, if they are used, they depend on small pumps. Miners are regularly trapped inside when tunnels collapse, can be drowned in flooding, and may asphyxiate due to noxious gases underground (this latter risk was particularly noted in the Walungu area of South Kivu);
- Artisanal miners typically climb in and out of shafts and tunnels without any safety harnesses, ropes, or other means to stop them from falling;
- Personal Protective Equipment (PPE) is not popular amongst artisanal miners for several reasons including: (a) it can restrict their movements; (b) it can be hot and uncomfortable; (c) it is expensive and hard to get; (d) even if they can get it, it is hard to ensure that each miner can get the right size; and (e) it can be stolen. The lack of PPE, or the use of cheap and ill-fitting PPE, results in head, eye, hand, foot and other injuries on a regular basis. In certain exceptional mines, the use of PPE is becoming accepted. For example, at the SOMIKA mineral sorting site at the Kawama artisanal mining zone in Katanga, the majority of the artisanal miners were wearing boots and the practice of wearing hard hats is emerging;
- Underground workers depend heavily on head-torches, usually using a flashlight strapped to the side of their head with a rubber strap;
- Materials such as mercury are handled widely in gold mining areas and explosives are used in some mines with no procedures for safe storage or use;

- Sites exhibit a lack of hygiene with resulting high levels of disease. Potable water sources are not protected and minerals are often washed in the same areas where clothes, cooking utensils and other items are washed, as well as where personal bathing occurs. Scant attention is paid to hygiene standards with latrines rarely being dug or managed.

Given the poor (or non-existent) standards of health and safety it is remarkable that there are not more accidents and fatalities. In August 2009, 18 people were killed in a diamond mine collapse in Mbuju-Mayi¹⁹. In January 2010, six miners were killed and five injured when an old Gecamines mine collapsed in Kolwezi, Katanga²⁰. During the fieldwork, the team were informed of a mine collapse which killed 14 people near Twangiza (though this was not reported in the press and could not be cross-checked) and team members were present when a minor landslide caused a partial collapse of a tunnel at a mine in Ituri. Fortunately no one was injured in that incident however everyone returned to work with no consideration that a more serious accident could follow.

4.3 Roles and management structures in artisanal mining

The structure of management and operations in artisanal mines varies from site to site. In some cases, miners work as regular or casual labourers for mine owners, being paid a fee for their work. In others, they work in teams in a semi-autonomous fashion, paying a fee to the mine owner as a percentage of their production with or without an additional fee for their site, etc. Within teams, the roles and responsibilities are usually clearly defined during each work period, though the roles may rotate around team members on a shift basis. The terms used to describe each role also vary:

- A *creuseur* is an artisanal miner; an *orpailleur* is an artisanal miner who digs for gold;
- A *concasseur* or *twangeuse* crushes rocks;
- Laveurs (washers) carry out lavage (washing) or tamisage (sorting);



Mixing gold and mercury.

- *Transporteurs, porteurs, ‘mama hi-lux’, or ‘mama chameau’,* transport material from the mines to the washing sites, and from the washing sites to the depots;
- Commissionaires provide petty cash to artisanal miners as they buy small amounts of material to accumulate, which they then sell on to the *négociants* (traders);
- The finance to invest in the mine or to survive day-to-day if the mine is non-productive is provided by financiers or *supporteurs*.

Artisanal mines in the DRC are generally very hierarchical structures though boundaries of responsibilities may become blurred when multiple agencies (government, traditional authorities, and private business interests) are involved. This is very much the case where there are strong associations and cooperatives on site.

In an effort to summarize the most general terms of relations in artisanal mines, Figure 2 is presented as a generic schematic of how working relations are organized in a ‘typical’ mine.

4.4 Associations and cooperatives

If a group of artisanal miners wish to start exploiting an artisanal mining zone with any form of semi-industrial equipment, under Mining Regulations Articles 234-237, they must form a mining co-operative. They must all hold their artisanal mining Cards and make an application to CAMI following meeting all the conditions outlined in the Regulations. They must be formed as an ASBL (*Association Sans But Lucratif* – i.e. a ‘not for profit’ organization). Final approval must come from the Provincial Division of Mines.

Throughout the Study, the creation of cooperatives was continually cited as a key action required for the *encadrement* (organization) of the artisanal mining sector. Indeed, many cooperatives and associations already exist with a wide range of structures, objectives, and promised benefits. The cost of membership varies, for example:

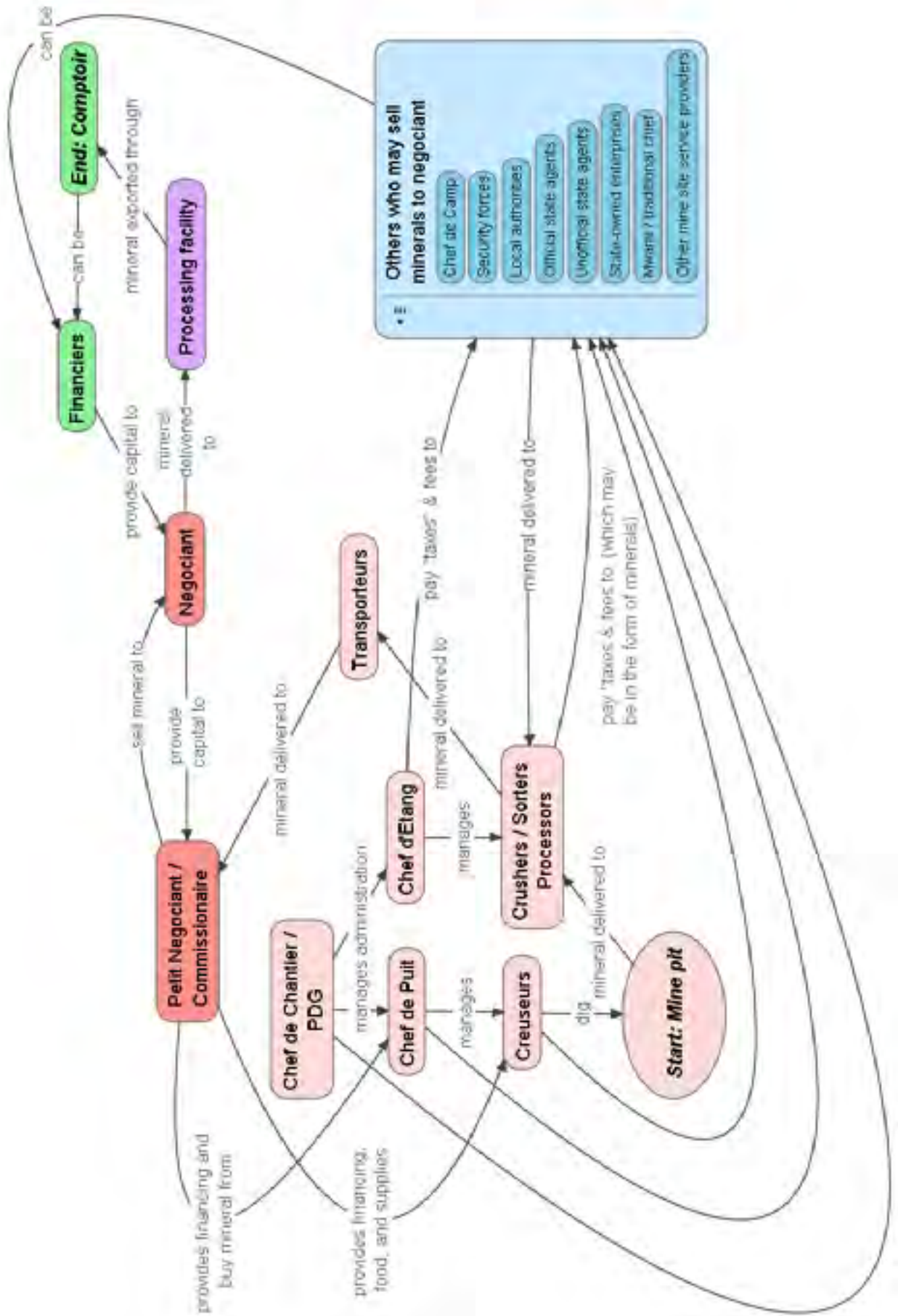
- COMBEKA (*Coopérative Minière de Bien Etre Communautaire de Kalehe*): membership is 200kg of cassiterite and a valid Carte de Creuseur or Négociant
- ANEMNKI (*Association des Négociants Minerais de Nord Kivu*): membership is one payment of adhesion \$120; \$10 for each cargo flight; a valid Carte de Négociant

People in artisanal mining cooperatives don’t always share the same objectives for forming or joining the cooperatives. In some instances, people are ‘required’ to join (with a high entry fee) as an effective ‘license to operate’ on the sites. Alternatively the cooperatives may be created by family groups. Equitable profit-sharing and collective risk taking which may be hallmarks of other cooperatives are not amongst the priorities or benefits of these groups.

There are also groups created for protection and promotion of trading interests, notably amongst the *négociants* and *comptoirs*. Some of these cooperatives can be extremely powerful commercial and political entities, an example being the big cooperatives of Katanga, notably EMAK-C (*Association des Exploitants Miniers et Artisanaux du Katanga*) and CMKK (*Cooperatif Minier Maadini Kwa Kilimo*).

Whilst Maniema was outside the remit of this study, the observations made by Mthembu-Salter in his 2009 study on artisanal mining in Kalima are very interesting to note. In Kalima, “*associations rarely number more than 20*

Generic description of actors in the artisanal minerals chain in the DRC



people and are scrupulous about internal democracy, in many cases annually electing a president and vice-president and often a secretary and treasurer as well. In most cases, digger association presidents are men but there are some women presidents too. Association presidents are responsible for negotiating sales to negociants and are said typically to retain 30% of the revenues earned by junior members of the association. There were no reports of conflicts within or between digging associations turning violent, despite the fact that there was no official registration or demarcation of each association's mining territory. One reason offered for this was that there was plenty of cassiterite around Kalima to go around".

In some areas, conflicts were reported between SAESSCAM and the cooperatives on site, especially in areas where SAESSCAM was a late entrant to a site where there was already a strong cooperative in place. When SAESSCAM try to set up operations these are often considered to encroach on the existing systems that the cooperatives have established for managing the artisanal miners. They cooperatives also resent having to pay new taxes to SAESSCAM.

In 2010, Pact (through the USAID funded project, Copper, Cobalt and Conflict) interviewed 267 artisanal miners in and around the town of Kolwezi in the Katanga copperbelt. The results of the study showed that only 16% were affiliated with mining cooperatives (EMAK, CMKK and COMAKAT in order of importance). None of the artisan miners interviewed who were cooperative members received cooperative dividends despite being stipulated by the cooperative's governing rules and regulations.

Training for cooperatives has been done by the ILO in Katanga, and excellent work to establish diamond cooperatives in Banalia and Bafwasende, Orientale, has been done by CENADEP. These are both projects which provide good groundwork for further interventions.

4.5 Artisanal Mining Zones

Under DRC law, artisanal mining should only be carried out in officially designated artisanal mining zones. In theory, these zones are created where mineral deposits are not suitable for industrial or semi-industrial exploitation but are still viable and lucrative for artisanal mining. Artisanal Mining Zones are created through an Arrêté issued by the Minister of Mines following a recommendation from the Directorate of Mines and of the Governor of the Province. Artisanal mining zones cannot be created on land which is 'covered by a valid mining title' hence no artisanal mining can legally occur on land which has been granted to a large-scale mining company. Once an artisanal mining area has been designated, CAMI is notified and it should be inserted in the registry survey map.

The CAMI report 2003-2008 notes that 194 Artisanal Mining Zones, covering 6,569 carrés and 5,580.7 km², which represented 0.2% of the national territory, had been created by the end of 2008²³. In 2009, a further 20 Arrêtés were issued to establish artisanal mining zones. The best data that the consultants could get was a dossier from the CTPCM which detailed 68 sites as follows (full details are given in Appendix 5):

- South Kivu: 7 sites
- North Kivu: 6 sites
- Maniema: 11 sites
- Kasai Occidental: 6 sites

- Equateur: 12 sites
- Orientale: 9 sites
- Katanga: 17 sites

This is a recent and positive development as, up until recently, there were hardly any artisanal mining zones designated. However, despite their existence in law, the reality on the ground is more of a challenge. Some of the difficulties include:

- Very few people know about these sites nor do they have the equipment to delineate them at ground level;
- There is no geological information publicly available which would assist a group of artisanal miners to determine how best to effectively and efficiently manage and exploit the sites;
- There are no resources available to invest in developing the sites;
- There are no mechanisms by which technical skills, resources, equipment, etc, can be provided to the artisanal miners;
- There are no detailed guidelines on how artisanal mining zones should be structured and managed.

There is very little security of tenure for artisanal mining zones. Under the law, an industrial company cannot be granted a mining title for land which is designated for artisanal mining; however this article provides little or no protection as, at any time, the Geology Directorate can carry out exploration work at any time in an artisanal mining zone. If a deposit is found which is suitable for small-scale or industrial exploitation, the zone can be legally closed in sixty days. During that period, the artisanal miners have the right to request a license to carry out the small-scale or industrial mining themselves but, in practice, this is an impossible step to demand within an unrealistic time frame.

Articles 14 and 15 of Annexe 2 of the Mining Regulations state that a fund should be established for the rehabilitation of the environment around every artisanal mining zone. The means of setting up this fund, the payments to be made, identification of the competent local authority to administer the fund and the plan of how the funds should be used should all be detailed in an Arrête from the Minister relating to each site. The fund is independent of the public financial accounts and does not pass through the provincial or state treasury.

In order for Artisanal Mining Zones to have a chance of success, a significant investment needs to be made in identifying suitable sites, coordinating suitable investment in their development, and providing and enforcing guidance on how they are to be managed. The following notes should not be considered to be exhaustive as more reflection is needed on artisanal mining zone creation and management (see Chapter 10: Recommendations). However some experience has already been gathered and these questions and steps were identified by a mixed team of SAESSCAM, Pact, and geologists from Anvil Mining in February 2008. USAID and Anvil Mining funded a team from the United Nations (involving representatives from UNOPS, OMS, UNFPA and UNICEF) to carry out an assessment of the social needs and responsible management of the Kawama artisanal mining zone, outside Kolwezi.

- **Responsibility:** Who is responsible for developing, operating and managing artisanal mining zones? This needs to be agreed and clearly articulated. This is the first, essential pre-requisite for all other steps²⁴.
- **Site development:** The sites which have been designated in the provincial *Arrêtés* must be reviewed and a comparative study carried out to understand the basis for their identification as artisanal mining zones? What geological information is available and what more is needed? Can a partner be identified who can provide that geological knowledge? This will enable a process of prioritization of sites to be carried out.
- **Partners:** If small-scale enterprises are to be used as partners on the site (as in Kawama), they must submit clear plans for the development of the sites they propose to work on. This must include: their exploration/drilling programme; the investment they plan to make immediately in site development; the numbers of artisanal miners they can support on their site; the current projected life of the resource according to the results of their mine plan and the number of artisanal miners employed.
- **Site management:** For each site, there must be a designated authority tasked with the safe and effective management of the site. This authority needs to have the expertise and resources to develop a comprehensive site management plan clearly defining the management of issues such as census, control of numbers, registration of traders, monitoring of production & trade statistics, site operational rules and regulations. This plan should define the roles and responsibilities of all actors including: the responsible authority; SAESSCAM; *Division des Mines*; Cooperatives/Associations/Syndicates; local Chiefs and community; and security providers.
- **Health, hygiene, water:** Potential partners and sources of assistance must be identified and their assistance requested in order to provide support and training to the artisanal miners and cooperatives in relation to organisation and representation as well as the obligations of *creuseurs* regarding safety, health (notably cholera, typhoid and HIV/AIDS), sanitation/ latrines, use/protection of water and the protection of the environment.



*Gold and mercury 'amalgum' (Top);
Old machine piece being used as a cassiterite
rock crusher (Bottom).*

- **Registration & Legislation:** In order for all aspects of the site to move into the legal domain, the following should be put in place: all artisanal miners working on the site should hold an Artisanal Mining Card; all *negociants* must hold a Traders Card; child mining must be prohibited on the site; legal taxes must be disseminated and a community monitoring system put in place to ensure that only these legal taxes are collected and that security services and other government agents act in a legal, professional manner at all times.

4.6 Transformation of artisanally-mined materials

Any person involved in ‘transformation’, that is processing or value-addition, of any artisanally mine product must first receive authorization from the Provincial Division of Mines (Article 238). Amongst other information required to receive this authorization, the applicant must declare what type and scale of transformation is to be undertaken, as well as describing the techniques to be used.

Cyanide, mercury and other dangerous minerals can only be used in a workshop or site approved by the Ministry and it is illegal for artisanal miners to use these directly.

The degree of processing which artisanally-mined minerals in the DRC receive varies:

- Artisanally-mined copper and cobalt are typically sold to foundries and processed in Kolwezi, Likasi or Lubumbashi;
- The comptoirs of Goma and Bukavu have processing units to treat cassiterite, tantalite and wolframite to a certain grade. Recent directives from the government that they need to achieve 70% have been met with dismay as many consider this is not possible with their current equipment, and they need new investment to upgrade but investment is unlikely given the current climate and focus on sourcing in the Kivus.
- Gold is typically exported raw or as burnt amalgam. The research team did not find any local foundries producing ingots.
- Diamonds and gemstones are exported rough. There are no artisanal-level cut and polish facilities.

In April 2010, the national Minister of Mines, Martin Kabwelulu, banned exportation of concentrated mineral products from Katanga province, forcing the mining operators to build metallurgic factories to produce raw copper. This followed several instances in which the Provincial Governor, Moïse Katumbi Chapwe, had instituted bans on the export of raw materials. The Minister noted that the measure should have come into force three years ago, but its implementation was delayed. *“There has been a grace period since 2007. We had asked the mineral operators to construct metallurgic factories to add value to our minerals. And those who did not do this and are still exporting the concentrated content, we are forced to tell them to stop. It is only those who are producing metallic copper and metallic cobalt who can export their products,”* he explained²⁵. Whilst these operators were primarily large-scale companies, many of them still purchase artisanally mined material, particularly cobalt. Periodic bans have also been placed on cassiterite comptoirs in the Kivus²⁶.

The issue of valuation of diamonds and semi-precious gemstones and the installation of cut and polish facilities was raised by several stakeholders in the Kivus. However, gemstone mining in the Kivus at this point in time seems to be on an ad hoc basis. A mine will incidentally find deposits of tourmaline or amethyst but few of the

traders will handle this as they have no guaranteed market for it. In Butembo, amethyst can be purchased by the kilogram. This may be a circuitous argument: *'there is no market because gemstones are not mined formally - but however gemstones are not mined formally because there is no market'*. The diamond comptoirs of Kisangani were positive about the potential for having increased value addition for Congolese diamonds. They report that around Kisangani, some 30% of the diamonds are gem quality which is a higher percentage than the Kasais.

4.7 Suggestions and comments from the field

Ensure that artisanal miners have legal status through their cards

The messages from the field regarding cards were clear: (a) make the cheaper; (b) make them easier to get; (c) give us some benefits for holding these cards.

Improve working conditions in the mines

No one wants to work in dangerous conditions and artisanal miners are vocal about the risks they must take. In some rare cases they are forced into taking risks by others, but in many cases they choose to take the risks because it takes too long or costs too much to do the work in a safer way, or they simply don't know how else to do it. Lack of training is a key factor, as are lack of alternatives. For example, when told that it was illegal to use mercury, artisanal miners understandably demanded to know how else they were supposed to work. Training and equipment were almost universal recommendations from stakeholders, however these must be coupled with incentives for their uptake.



Artisanal miners trying to reconstruct a rail track to move materials from a collapsed mine, Orientale.

Carefully consider any proposed changes in the hierarchy and management systems

It is hoped that the diagram of the artisanal mining management and trading system gives some insight into the complexity of the web of activities around each mine. Changing any one actor or relationship can have repercussions across the whole web and therefore initiatives must have a thorough understanding of the dynamics of each mining area before any interventions are launched.

Create or strengthen artisanal mining associations and cooperatives

Associations and cooperatives were regularly given as a key recommendation for improving the sector however few, if any, examples were found of these groupings delivering tangible benefits to the miners beyond the right to operate or trade. They are more frequently seen as a way of making the sector more manageable than working with individual diggers. Groundwork needs to be done on defining how cooperatives could and should work before existing models are simply extended.

Create or formalize artisanal mining zones

This was a universal recommendation and request. All artisanal miners know that they are supposed to work in legally designated zones, and all want to have access to them. The big concern is that the country is already 'carved up' for the big mining companies therefore there is no land left for artisanal miners. Artisanal mining needs to be more clearly embedded in CAMI's responsibilities.

Improve transformation of materials

The major recommendations that were made in relation to transformation of materials related to infrastructure, notably roads and electricity. The challenge for PROMINES is that such interventions are outside the remit and resources of the project. Yet it should be noted that vocal and influential stakeholders want to see PROMINES supporting efforts to improve mining infrastructure and services.



In this chapter:

- 5.1 Security actors and arrangements in artisanal mines
- 5.2 Local conflicts and violence
- 5.3 Conflicts between artisanal and large-scale mining
- 5.4 Control of artisanal mines by armed groups
 - North and South Kivu
 - Katanga
 - Orientale
- 5.5 Suggestions and comments from the field

5.1 Security actors and arrangements in artisanal mines

There are typically multiple layers of security provided by a suite of legitimate and informal security agents in artisanal mining areas. The list includes the police, private security groups, and the Congolese army (FARDC - *Forces Armées de la République Démocratique du Congo*). These are described in Table 7.

Their presence is, by and large, met with mixed feelings and perceptions by individuals working in and around mines - whether they be artisanal miners, traders, small business owners, and other service support providers. On the one hand, these various structures do provide a level of security at sites. However, more often than not, these same structures become intrinsically embedded in the daily operating of a mine's supply chain. This manifests itself through harsh control mechanisms for exiting product, to additional 'informal taxes' to work and operate on sites, to direct payments for security services rendered in the form of product on an established basis. All this occurs with varying levels of intimidation.

The greatest challenge to the presence of public and private security forces on sites is the question of competing authorities and mandates. Just as the section on government capacity highlighted the wide range of legally mandated actors contributing to governance of the mining sector, and the confusion and competition that often ensues as a result of the multitude of actors claiming legitimacy to govern a site, so too do the nebulous overlap of mandates, roles and responsibilities of various public security institutions contribute to greater confusion and competition at the mine level.

The presence, and effective functioning of, security providers on artisanal mine sites is essential to preventing and resolving conflicts. Ideally as artisanal mining sites move further and further into formal government controlled sites, the exercising of mandates will be clearer and more responsibly managed. However in the current artisanal mining landscape, the limited formal presence of government authorities on the vast majority of sites creates an interim vacuum through which security structures do take advantage.

Above and beyond the Government structures found in Table 6, private security companies may be hired by mine managers, associations or small-scale mining companies to provide security services in areas where artisanal mining is occurring. These can include services are known variously as the ‘Policar’ (*Police de Carriere*), or the ‘Disciplinary Brigade’, or some such title, typically hired by the *Chef de Chantier* or PDG. These agents will typically have responsibility for disputes at mine level, within the tunnels, protecting material from overnight theft, etc. These agents will be paid by the mine management who will levy a charge on all actors at the site to pay for this service.

Large scale mining companies often hire private security companies on their concessions. In the DRC, private security providers are not permitted to carry firearms and have no mandate for public security provision. Their responsibility is directly related to the premises and assets of their employer. Typically their role will be restricted to access-control, monitoring of transport of materials, prevention of theft (or ore, equipment, diesel, construction materials, etc) and they will be paid by the mine management.



Artisanal miners waiting to be registered by a mining company and SAESS-CAM to become enrolled in programmes for alternative employment.



Mine police participating in the Butembo workshop, North Kivu. (Bottom).

Table 7: Government security actors in artisanal mining areas

Security Service	Mandate/Role/Responsibilities	Observations
<p><i>Police Nationale Congolaise</i> (PNC)</p> <p>or</p> <p><i>Police des Mines et Hydrocarbures</i> (PMH)</p>	Both of these services have authority in relation to keeping the peace but do not have any mandate for, or right to, direct involvement in artisanal mining activities. The police (including the <i>Police d'Intervention Rapide</i> or PIR) may be deployed by the local authorities when it is deemed that threats, tensions or violence in artisanal mining areas could create risks to individual and public security. In theory, the police should only be deployed to artisanal mining sites in case of need and otherwise their activities should be restricted to public security duties in surrounding villages.	In practice, however, the police are frequently established at the mines and are paid either by the associations or small-scale companies which retain their services, or through extorting payment from the artisanal miners.
<i>Agents of the Guard Industriel</i> (GI) of the SOEs	These security guards are deployed in artisanal mining areas, ostensibly to protect the assets of the SOEs.	Numerous reports were received of the GIs on various sites extorting payment from the artisanal miners and traders, often in the form of ore.
<i>Forces Armées de la République Démocratique du Congo</i> (FARDC)	In some cases in eastern DRC, they have a legitimate and mandated role by the government to protect the population in and around the mining areas that are at risk from attack by militia groups such as the <i>Forces Démocratiques de la Libération du Rwanda</i> (FDLR)	The FARDC should, in theory, be paid for their legitimate security services by the government however in practice they often extort payment from the artisanal mining and trading community in ore. However, a 2009 survey showed that a widespread presence of the FARDC in mines outside the conflict zones of the Kivus where their presence cannot be justified, including in Maniema Province, Ituri District of Orientale Province and Tanganika District of Katanga Province ¹¹ .
<i>Garde Républicaine</i> (GR), formerly known as the <i>Garde Spécial de la Sécurité Présidentielle</i> (GSSP)	In some mines this elite corps of soldiers responsible for the security of the President, are present in artisanal mines.	As recently as February 2010, artisanal miners in Mawangu, Bandundu are reported to have denounced the Republican Guard's extortion of diamonds from them.
<i>Direction Generale de Migration</i> (DGM) and the national intelligence agency, <i>Agence Nationale des Renseignements</i> (ANR).	Other government agents occasionally maintain a presence in artisanal mining areas. Their agents purport to have a security-related role in the mines, ensuring that no illegal foreign interests are present and profiting from artisanal mining.	The miners themselves report that these agents demand payment for this 'service' in ore or money.

5.2 Local conflicts and violence

Artisanal mining areas are frequently associated with local conflicts and violence however, due to lack of credible statistics, it is impossible to state if this is exceptionally different from the levels of such incidents in Congolese society at large. As in most societies emerging from years of conflict, the limited governance structures present at the most basic level of community organisation perpetuates lingering war-time practices linked to impunity and corruption, and presents severe challenges to reinstating accountability. In some cases, the absence of viable dialogue mechanisms to resolve conflicts results in the display and use of force to resolve even the most petty differences amongst individuals. Violence and demonstrations have also become normal behaviour in some mining areas, notably Katanga, where responses to company and government decisions regarding concessions and artisanal miners' futures frequently result in conflict (see Box 3 below).

The types of conflicts and violence reported to the consultants during the research included:

- Community co-habitation and usurpation of power: these conflicts often occur as incoming artisanal miners inhabit communities near a mine. Habitations are built, resources such as wood and water are used up, and customs are often ignored. In communities where traditional authorities are weak, artisanal miners quickly usurp power for decision-making in communities and override traditional leadership. Basic law and order rarely exists and conflicts of the most basic nature occur, spurred on by prolific use of drugs and alcohol by artisanal miners. These communities can be perceived as ungovernable by state authorities and left on their own to resolve differences.

Box 3: Snapshot of conflicts in the news

Police fired teargas at hundreds of angry artisanal miners in Kolwezi in March 2008 as tensions rose over plans to evict thousands of illegal diggers from private concessions. Miners burned tyres in protests and violent clashes erupted. Around 700 artisanal miners armed with molotov cocktails, stones, and pickaxes clashed with police²⁷.

In April 2008, hundreds of artisanal miners clashed with police in Katanga after police shot one of them dead during an eviction from a state mining concession. The clashes began after police started clearing artisanal miners off the Kamatanda mine, 3 km from Likasi on a concession belonging to state mining company Gécamines. Residents said police were forced to abandon the eviction from the, in order to secure the mayor's office in the centre of town²⁸.

In April, 2009, artisanal miners working on the site of Kolwezi's zinc factory blocked the road leading to their workplace in order to claim the removal of all the roadblocks created by Gécamines' Industrial Guard (*Garde Industrielle*) which were being used for '*tracasserie*' (petty corruption and extortion).

Police clashed with illegal copper miners operating in the Tenke Fungurume copper/cobalt mining concession in April 2010. A group of illegal artisanal miners were dispersed from Kakule hill, within the mining areas of Tenke Fungurume, which sparked off riots that culminated into clashes between the miners and local authorities²⁹.

- Governance and decision-making: Distrust of traders by artisanal miners and the limited representational structures for artisanal miners breed a series of conflicts in the operation of an artisanal mine. Issues such as: sharing of materials; determining the limits of mining areas; prices and debt repayments; restrictions on access to sites; theft; and other actual or perceived injustices are common. Incidents occasionally (but rarely) occur where attacks and even murders occur in the mines, underground and in the camps.
- Sexual and gender-based violence, as well as violence against children, is reported in many artisanal mining areas. This is discussed further in Chapter 8.
- Access to and use of resources: clashes are not uncommon between artisanal miners and large-scale mining companies, particularly when the latter want to access resources which artisanal miners have traditionally occupied. In extreme cases, militant and angry artisanal miners have clashed with public and private security forces, resulting in destruction of property and deaths of artisanal miners, police and mining company employees.

It should be noted that significant numbers of ex-combatants work in the artisanal mines in certain areas and this is frequently cited as a potential source of conflict. A study carried out by Channel Research and Pact in 2009 found that of 340 artisanal miners interviewed in Ituri, 70% were ex-combatants. Yet the study found that the presence of demobilized soldiers is not, in itself, a cause for concerns about security. The artisanal miners interviewed were unanimous that they did not want to re-enter a military life or become re-engaged in conflict and, indeed, a response from the communities where they worked was that artisanal gold mining, or *orpaillage*, actually reduced the incidence of banditry as young men who might otherwise behave in a predatory fashion were employed in the mines³⁰.

The majority of local level conflicts outside the large-scale mining arena are resolved by the local authorities, traditional chiefs, and the communities themselves. In some cases, however, interventions have been developed by external agencies. For example, in 2007, a *Cadre de Concertation* for conflict resolution in the artisanal mining sector of Kolwezi was established under the presidency of the Mayor of Kolwezi as part of a project managed by Pact with funding from USAID and mining companies in Katanga. The participants in the *Cadre de Concertation* included the Bureau des Mines, SAESSCAM, artisanal mining cooperatives, large-scale mining companies, police, the FARDC, mineral traders, artisanal miners, and civil society. Pact acted as an early facilitator and, thereafter, an observer. In a recent survey it was found that 75% of actors in the sector were aware of the *Cadre de Concertation* and the majority considered it to be an effective way to avoid, reduce and solve conflicts³¹.

5.3 Conflicts between artisanal and large-scale mining

Given that a significant proportion of local security problems associated with artisanal mining are based on conflicts between artisanal miners and large-scale mining companies, this is an area which warrants particular attention. Many examples, of both good and bad practices, exist already in the DRC and are abundant in the artisanal mining sector in other countries.

Relations between artisanal miners and large-scale mining exploration can be somewhat symbiotic and this was reported regularly during the course of this research. Exploration teams focus their efforts on old and existing artisanal mining workings. Artisanal miners follow the exploration teams and may start to dig directly alongside the companies' drill rigs. Whilst this phase is often relatively calm, the tensions start to rise once either group has found a resource that they want to exploit.

Under the DRC law, the large-scale mining company effectively always has a stronger legal position than the artisanal miners therefore they are within their rights to require the artisanal miners to move or be moved. Companies cannot tolerate artisanal miners in close proximity to industrial workings for several reasons notably: health and safety regulations; security concerns including theft of ore, materials, diesel and equipment; reputational concerns if artisanal miners are using socially unsound practices such as child labour; pollution and environmental legacy concerns if artisanal miners have poor site management, water extraction/pollution and sanitation practices or are using mercury; on-going tensions and conflicts related to access issues.

The means by which the basic conflict between a company and a group of artisanal miners over a resource are resolved varies enormously:

- A company may request the government to come in and remove the miners from the site. If well managed, this does not have to be an interaction involving force. For example, in 2008, AngloGold Ashanti peacefully closed the Adidi underground mine at Mongbwalu on their concession in the Ituri District of Orientale. This abandoned underground mine was being mined by several thousand artisanal miners under the management of local authorities, businesses and security forces. The miners were using charcoal to heat and crack the remaining pillars which supported the roof of the mine and the risk of a major accident was severe. With the support of the provincial authorities, an intensive communications campaign, the support of the security services on the basis of agreed standards to respect human rights, and constant community engagement, the company managed to close the mine without any security incidents.
- A negotiated and compensated settlement can be achieved. In 2008, Anvil Mining needed access to an exploration site outside Lubumbashi, Katanga, where some 300 artisanal miners were working. The company opted for a negotiated settlement, offering the artisanal miners the equivalent of a month's compensation with assistance to move their stock and equipment, or the offer of a minimum of six month's employment with the company's exploration team. In the event, only 30 people accepted the offer of employment and went on to be trained to assist the geology team, to work in camp maintenance, or to work with the security teams. The others moved to a nearby artisanal mine.
- Employment and alternative livelihoods may be created to replace the income that the artisanal miners previously gained. For example, Tenke Fungurume Mining has assisted in the start-up of local supply businesses such as brick and fence-making which have created employment for several hundred artisanal miners.
- A company may find a way to engage directly with the miners to purchase their materials. In Kolwezi, Anvil Mining



Police returning from regular duty in the mines, Katanga province.

established a system of purchasing material from the approximately 5,000 artisanal miners who occupied the Kulu River. As they were operating in an old river bed, there were no health and safety issues associated with digging. The teams were well-organized by the cooperatives and SAESSCAM agents were on site, as were the Division of Mines and the Mine Police. Purchasing sites were established where the grade of material could be checked and the *négociants* were paid. The legal taxes due were deducted at the point of payment and put into the appropriate government account.

Approaches and lessons were shared by actors from all sectors in the DRC who participated in a 2007 conference held by the International Finance Corporation (IFC), CommDev, and CASM on relations between large-scale and artisanal miners in Katanga. Some of the key lessons which came from the participants in this meeting which related to the reduction of tensions between artisanal and large-scale miners included: the need for constant dialogue and realistic negotiation with artisanal miners; ensuring community and human-rights focussed approaches to ensuring security on their concessions; rapid creation of alternative employment options with a realistic assessment of the income that these must generate to be attractive; and positive, creative approaches to commercial co-habitation.

In 2010, CASM produced a new handbook called “Working Together,” which provides practical guidance to companies on how to avoid, approach, and solve the problems they frequently face when artisanal miners are present on their sites. The document offers information to help companies identify the type of ASM activity that is occurring on their site and provides a series of tools and approaches for positive engagement. The central focus of the tools provided is to promote collaboration between LSM and ASM in a way that protects both parties’ interests.

It should be noted that, whilst the majority of reported incidents of clashes between security forces and artisanal miners in relation to site evictions and the establishment of large-scale concessions are in Katanga, this is only because at present the scale and rate of commercial investment in mining in Katanga exceeds that in the other mineral-rich provinces. Few companies outside Katanga, as yet, have had to deal with large-scale site clearance and displacement of artisanal miners. It will be very important that the lessons which have been learned in Katanga about how to resolve these conflicts in a peaceful manner are articulated and used in the other provinces as industrial mining develops.

5.4 Control of artisanal mines by armed groups

North and South Kivu

The security situation in the artisanal mines of the North and South Kivu has many dynamics which are specific to the continuing conflict in eastern DRC. Many mines are under the direct control of armed groups. This occurs across a spectrum of control:

- Some mines are held directly by rebel forces or are frequently attacked by militia. Global Witness report that the FDLR systematically extort minerals and money from miners, charging a flat fee of 30% on mining proceeds in some areas and “taxing” minerals at roadblocks³²; The UN Panel of Experts final report in December 2009 calculated that mineral trading continues to deliver millions of dollars in direct financing to the FDLR. They also report that FDLR gold networks are tightly intertwined with mineral exporting companies in eastern DRC as well as in Uganda, Burundi and the United

Arab Emirates. The Panel also alleges that CNDP military officers deployed as part of FARDC Kimia II operations have profited from their deployment in mineral-rich areas, notably at the Bisie mine in Walikale, North Kivu, and in the territory of Kalehe, in South Kivu³³.

- The FARDC are officially deployed in some mining areas that are considered to be at risk of attack by rebel or 'negative' elements;
- Some mines are controlled by rogue or ill-disciplined DRC government forces against direct instruction from the government. There are also mines which are the 'property' of FARDC soldiers;
- Global Witness alleges that former rebels from the *Congrès National pour la Défense du Peuple* (CNDP) who joined the FARDC through an integration process in 2009, have taken advantage of UN-backed government offensives aimed at displacing the FDLR militia from profitable mine sites and thus have gained greater control of mining areas than they had as insurgents³⁴.
- Some mines are visited on a regular or occasional basis by FARDC soldiers demanding payment for their security services, typically demanding a certain amount of a miner's labour or production. Communities call this '*salongo*' which is a term normally used to describe obligatory community service.

This issue of '*salongo*' seems to be fairly ubiquitous in certain mining areas in the Kivus. Global Witness reports that at the Muhinga cassiterite mine in South Kivu, diggers told researchers that they are forced to pay \$10 each to the military for permission to spend a night working in the mineshafts. They also have to pay the army to use dynamite and are forced to hand over a day's production each Thursday. These miners allege that they are whipped and robbed by soldiers if they fail to pay. The PROMINES ASM research team were directly informed by artisanal miners at multiple sites that they have to provide a certain amount of production to the FARDC on a regular (weekly) basis or that they are forced to trade their gold for items which the FARDC bring with them, whether the miners want these products or not.

In 2009, IPIS commenced a project to map the militarized mining areas of the Kivus (MiMiKi). This project used local agents of the *Divison des Mines*, NGOs and other organizations to map the location of over 200 mines, the number of miners, the military actors involved in control of the mines and, where possible, the destination of the minerals. IPIS produced both an interactive map which is available online (<http://www.ipisresearch.be/mining-sites-kivus.php>) and an accompanying note. The report clearly explains the methodology, extent and limitations of the research as well as the authors' observations. They found that, in mid 2009, armed groups had positions at more than half of the sites listed on the MiMiKi map where they obtain income. IPIS found that the FDLR are primarily involved in controlling gold mining and trading and while some units seem to force people to work for them (e.g. several sites in Walikale territory), others are less of a physical threat and are only involved in trading the minerals (e.g. Misisi)³⁶.

Katanga

Whilst military control of mines is typically assumed to be an issue primarily in the Kivus, research by SIPRI Insights on Peace and Security in 2009³⁷ documented the presence, role and impact of the FARDC in mines in Tanganyika District of northern Katanga Province. They report that FARDC elements continue to have entrenched economic interests in artisanal coltan and gold mining in northern Katanga, particularly in Nyunzu Territory. This can be manifest as theft or extortion but also involves negotiated arrangements whereby soldiers provide security against external threats and protect particular interests in return for a share of the profits³⁸. The contin-



FARDC soldier.

ued presence of unauthorized police and army units in the vicinity of mines is in contravention of an order given by the provincial governor of Katanga in November 2009 for all unauthorized security services to leave mining areas³⁹.

Orientale

In 2010, IPIS produced a report on conflict motives in province Orientale which included a list of all armed actors known to be active in the province⁴⁰. They noted that, whilst the security situation in general in the province is much improved, the districts of Ituri, Haut-Uele, Bas-Uele and the territory

of Bafwasende continue to suffer from the presence of armed groups and associated sporadic violence. With reference to these groups, IPIS notes the following:

- There are no recent reports of war profiteering by LRA units and it is unlikely that it is implicated in the exploitation of natural resources on a large scale however there are allegations connecting the LRA to possible gold interests in the Durba/Watsa mining area as well as nickel in the south of Dungen but these have not been confirmed.
- In Ituri, the *Forces de Résistance Patriotique de l'Ituri* (FRPI) generate an income from mining activities and FRPI fighters are known to have come to work at the gold mining area of Bavi wearing civilian dress However their control over the mining activities is generally low.
- Compared to all other eastern provinces of the DRC, only few active Mayi-Mayi militias remain in *Orientale*. Two significant groups continue to operate and they both hold positions in the southeast corner of Bafwasende Territory, where the Maiko National Park is located.
- In Maniema, in the vicinity of Silisa, the Mayi-Mayi control gold, diamonds, coltan and cassiterite mines and extort illegal taxes from the miners. They are also present and active in Punia territory where the Kasese area has several areas of mineral concentration.

5.5 Suggestions and comments from the field

Improving the performance of government security actors

The first key message which came from the participants was that it is essential to ensure that security agents of the state are paid. This was considered to be the essential pre-cursor to any effort to improve their comportment in the mines. There was also a strong sense the police should be the only legitimate state agents with a mandate for security in the mines.

Reducing conflicts between large-scale mining and artisanal mining

The perspectives on how this should be handled depended greatly on who was being interviewed. In general, large-scale mining companies want the government to ensure them the Freedoms Guaranteed under Article 273 of the Mining Code – namely “*compliance with the law*” which states that artisanal mining will not occur on a granted title, and “*peaceful enjoyment of the perimeters relating to their mining rights*”. Companies often resent that they are left to solve this problem alone, sometimes even in a situation where their government partner is promoting and benefitting from artisanal mining. The miners themselves see the allocation of vast tracts of land to large-scale mining companies as unfair. A key element in resolving these conflicts must be to let artisanal miners work legally on land which has appropriate and accessible resources in a way which does not compromise the standards, reputation or security of industrial companies. Other measures proposed included more active cohabitation arrangements, investment in alternative livelihoods, job creation, etc.

Improving security in the militarized mining areas and conflict-risk zones

During the course of the research, the single most important intervention in terms of improving security in artisanal mining in eastern DRC was cited as demilitarization of the mining areas. Many questions were asked about what PROMINES would do to contribute to this.

In the CASM publication, ‘Beyond Conflict’, Mitchell and Garrett emphasize that the principal means of resolving the crisis of insecurity in DRC is reform and investment into the security sector. They propose that “*reform of the mineral sector, while urgent, is a separate development problem, which involves governance reform and technical interventions...to ensure the sustainability of reform efforts*”⁴¹. This creates a good overarching statement for how PROMINES interventions should be seen in relation to the question of insecurity and minerals. The major issues of conflict in eastern DRC cannot and will not be resolved through interventions in the mining sector however the two are linked. PROMINES’ investment in governance and technical improvement must relate to, and support, security reform but should not be side-tracked, nor pressured, into trying to address security on a large scale.

The areas where PROMINES can make positive interventions include:

- Direct engagement in establishing norms to determine the spectrum of different levels of military involvement in mines and what is acceptable, with appropriate mapping of the mines to create a baseline for monitoring the demilitarization process. The maps should be publicly available online and, over time, the responsibility and capacity for their update should be transferred to SAESSCAM;
- Support should also be provided to local civil society groups to provide independent monitoring of the military control status of artisanal mining areas;
- Maintaining contact and ensuring synergies with organizations and interventions working on stabilization and demilitarization. This would include active engagement with the DRC government, FARDC, MONUC, the Provincial authorities, NGOs, regional groupings, and others;
- Supporting and evaluating efforts which are being made to improve artisanal mining efforts, such as the Government of DRC/MONUC initiative to establish *Centres de Negoce* in North and South Kivu. It will be particularly important to provide technical input, advice, capacity, etc, to such initiatives which

have a strong security component but need a stronger mandate and guidance on the mining and trading side. It will also be essential to ensure that these are embedded in the sector prior to MONUC's withdrawal from each area.

- Providing coordination and coherency through the Ministry of Mines to all actors involved in cross-border initiatives aimed at demonstrating improved transparency in mineral supply chains. Linking with regional bodies (International Conference on the Great Lakes Region - ICGLR), border authorities (Uganda and Rwanda) and end buyers (companies, smelters and refineries) is paramount to ensuring that the demand side is adequately addressed. Whilst efforts can be made at the DRC level to ensure greater demilitarisation of mines, the supply chain and its drivers across international borders cannot be ignored. This last point is addressed in the section below on trade.

Chapter 6: Trade, Access to Markets and Certification



In this chapter:

- 6.1 Authorization to trade
- 6.2 Primary artisanal mining trade channels and markets
- 6.3 The domestic value chain
- 6.4 The Chinese influence in artisanal mining
- 6.5 Pressure on minerals markets in eastern DRC in relation to 'conflict minerals'
- 6.6 'Conflict minerals' initiatives
- 6.7 Challenges for implementation of the initiatives
- 6.8 Suggestions and comments from the field

6.1 Authorization to trade

In the DRC, artisanal miners can only sell their mining products to traders, exchange markets, trading houses, artists or entities approved or created by the State. Trading is covered under Articles 116-127 of the Mining Code. Traders must hold a valid *Carte de Negociant* issued by the Governor of the Province (the process is described in Articles 242-250 of the Mining Regulations). The card is valid for one year and the cost varies according to *Arrêtés* issued by the Minister. Failure to meet all the conditions of the *Carte* can result in its being withdrawn and traders being suspended for three years.

Traders are obliged to provide reports on all their trading activity. The report should cover the quantity, quality and price of all minerals trades in the last six months; the number of transactions; and the quantity of stock held at the end of the six months.

Authorized trading houses are authorized to purchase, sell and export artisanally mined minerals under a one-year license granted by the Minister of Mines. The authorized trading houses can employ or otherwise use the services of purchasers who must be the bearer of a valid foreign work permit for the artisanal mining sector in the case of expatriates, or a valid work permit for nationals; and who must hold a permit to reside and travel within the mining zones, for expatriate purchasers.

Authorized trading houses must operate under the supervision of agents from the *Division des Mines* and related services such as the CEEC, and submit reports of their activity. They must inform the Minister of Mines and the Central Bank of the Congo the sites of their purchasing counters for gold, diamonds and other artisanally-mined minerals. They must own at least one building made of durable materials in each centre of operation. Trading

houses are obliged to buy all artisanally-mined minerals that they are offered, regardless of their size, quantity or quality.

Comptoirs Agréés are buying houses authorized to export artisanally mined minerals. They too must obtain a license from the Minister of Mines in accordance with Articles 258-265 of the Mining Regulations.

The Mining Regulations make provision for the creation of Bourses for artisanally-mined materials (Articles 266-268) however, to the best of our knowledge, no such Bourses actually exist. An initiative was proposed by the Belgian government's Task Force on "Mineral Resources in Central Africa" (TF MIRECA) to establish "*a new Cu and Co ore stock exchange in the Katanga Province, where ore and derived products (metal concentrates, alloys, etc.) will be exchanged between registered sellers and buyers at the market price, based on international ore quotation*"⁴². However it does not appear that this project was implemented.

Markets where artisanal mineral traders congregate do, indeed, exist. For example, there are public diamond markets in Mbuji Mayi, and weekly gold markets in the villages around parts of Province Orientale (for example, Djalesegia) and in South Kivu (for example, Mugogo). Establishment of a formal Bourse requires the authorization of the Central Bank of Congo. This may be relevant to the MONUC initiative to establish '*Centres de Negoce*' in the Kivus, however the actual trade mechanism which will exist at these *Centres* has not yet been determined.

6.2 The domestic value chain

Artisanal miners may have considerable debts to service and his creditor will frequently be a trader with whom he has a fixed term sales arrangement and a long-standing relationship. Miners need traders. There is a tendency for external observers to see traders as parasitic middle-men who should be removed from the system in order for the miners to get a better deal, however this is neither easy nor necessarily appropriate. Miners cannot leave the mine, especially if it is remote, to travel to a town to sell their material. The risks of losing their site and the opportunity cost of not digging during that period are too high. Traders provide a source of finance, cost efficiencies on transport, provision of merchandise to be traded in the mines. Miners don't have the network or expertise to command a significantly improved price than the *negociant* would have paid them. The traders at the mine site often act as agents for big buyers. These smaller traders will be using funds from a big buyer and will have little flexibility around pricing.

In general, the margins paid on minerals as they change hands between miners and various traders within the DRC are small.

- At the artisanal mining zone of Kawama, there is supposed to be a price difference of \$50 per ton of heterogenite compared to the price in the central trading town of Kolwezi. However, pricing of cobalt is very grade-sensitive and, as they were only finding very low grades at Kawama, it was not possible to make a profit at this much reduced price per sack. Therefore Kawama cobalt is currently at the same price as that of Kolwezi.
- The margins on gold are typically very small with perhaps less than US\$1 per gram being made by various traders who handle it. The actual purchasing price at the mine is typically not very big. For example, in one trading chain:

- Gold price paid by négociants at the mine: \$28
- Gold price paid by négociants in town: \$29.25
- Gold price in Ariwara/Butembo: \$30.50
- International gold price: \$30.70

The biggest price difference we observed between the price at the mine and that in the nearest trading town was \$4 per gram. At this particular mine, the *orpailleurs* themselves knew the difference between the two prices (20,000 FC at the mine, 23,500 FC in town) and accepted it. It appeared that there was a price-fixing cartel or other mechanism in operation to maintain this large profit margin.

Lack of knowledge of the value of their product was regularly cited as a problem for artisanal miners however this is just part of the issue. Knowing the international price for a pure, refined mineral does not necessarily ensure that a miner can find someone to pay that price for his ungraded, raw product, nor that he would necessarily have the freedom of choice to sell it to that buyer even if they existed. Therefore it is clear that having resources (equipment, training, telephone messaging of prices, valuation services, etc) to improve knowledge of mineral prices and the grade of artisanally mined materials would be helpful, these must not be considered as stand-alone solutions to improving the income artisanal miners gain from their product.



Woman washing copper at a 'laverie' in Katanga.

In Kalehe District of South Kivu, at the time of the fieldwork, cassiterite was US\$4-4.50 per kg however the miners could sell it on the unofficial circuit for US\$5. Because the buyers did not pay taxes, they could give a better price.

6.3 Primary artisanal mining trade channels and markets

Substantial quantities of minerals from the DRC find their way to market. In terms of world trade, exports from the DRC represent 6-8% of tin (24,592 tons), 15-20% of tantalum (155 tons), and 2-4% of tungsten (1,300 tons)⁴³. Although a portion of these minerals pass through official trade channels, a large percentage are traded informally, and estimates of informal flows inherently have large margins of error. However, according to a report by CASM in 2009 quoting local sources, an estimated 95% of Eastern DRC's artisanal gold is traded informally⁴⁴. A report from 2008 suggests under-reporting of export figures of cassiterite by roughly 35%.

The informal market was studied in 2009 by IPIS, which carried out extensive research into the scale of illegal trade in minerals from the Kivus⁴⁵. The study showed that although official *comptoirs* can be involved in the illegal trafficking of minerals, alongside the official circuit of exporters an unofficial circuit of unregistered *comptoirs* exists. These traders buy minerals from *négociants* and sell them in Uganda, Rwanda, Burundi and Tanzania as

well as selling gold directly in the Gulf States. Illegal mineral trading not only leads to losses in tax revenues for the DRC government, but poor data on actual production figures can lead to distortions at the policy level.

U.N. data from 2007 suggests that China is not only the largest consumer of the DRC's coltan, but its state-owned Ningxia Non-ferrous Metals Smeltery (NNMS) is also processing most of the raw ore that China imports⁴⁶.

With regards to gold, it is reported that in 2008, DRC legally exported only 122 kg of gold, compared with an estimated 5 tons of production⁴⁷. Based on a variety of sources, our research indicates that perhaps some 6-8 tons of gold is produced in DRC annually yet only a couple of hundred kilograms is reported in national export statistics. Therefore the trade is virtually entirely illegal and has very significant vested interests controlling it. The lack of formal gold comptoirs is also very striking. For example, there are no gold comptoirs in Kisangani, none in Butembo, and there is only one in Bukavu.

The dynamics of copper and cobalt trading are changing as new, large-scale mines come into operation however, at present, the Governor of Katanga estimates that more than 60 out of Katanga's 75 processing plants are owned by Chinese companies and over 90 per cent of the region's minerals go to China⁴⁸.

6.4 The Chinese influence in artisanal mining

China is now the DRC's largest trading partner. Chinese demand for minerals has grown rapidly over the last decade. Recent predictions by the World Gold Council assert that Chinese demand for gold will double over the next decade, even as its domestic sources dwindle⁴⁹. China currently trails only India in its consumption of gold.

These developments are cause for concern for some who assert that, in contrast to Western companies under pressure to demonstrate social responsibility, Chinese companies often cut corners on operating standards and show little regard for human rights. This sentiment is fuelled by headlines such as "*China Lets Child Workers Die Digging in Congo Mines for Copper*" (Bloomberg, July 2008).

Details of legal and human rights abuses were reported in the 2009 RAID report, "Chinese Mining Operations in Katanga"⁵⁰. The allegations in the report include: failure to respect environmental standards; accidents due to lack of protective clothing, training and procedures; children as young as 10 years of age being used to load bags in the trading houses; workers are exposed to radioactive minerals; assaults; failure to uphold Congolese labour law; and corrupt practices. The report also notes that the Chinese find it difficult to do business due to corruption on the Congolese side and that they would like to have better relations with Congolese people but there are language and other barriers that need to be overcome.

In 2009, research was carried out for the Extractive Industries Transparency Initiative (EITI) and the Revenue Watch Institute (RWI) by Centre for Chinese Studies at the University of Stellenbosch to ascertain perceptions held by Chinese stakeholders of operational environments and transparency in general, and the Extractive Industries Transparency Initiative (EITI) in particular, in Gabon and the DRC⁵¹. The research findings indicate that the majority of Chinese stakeholders currently engaged in the DRC are not aware of EITI. However, Chinese company representatives interviewed showed a willingness to comply with local rules and respond quickly to demands from local authorities as well as a positive attitude toward the principle of transparency in general and EITI in particular when informed about the initiative.

These findings have important implications in terms of considering the role of Chinese companies in artisanal mining and trade. They suggest that despite current problems, the Chinese mining community is willing to engage positively on issues related to artisanal mining, and that the problems currently seen are less about deliberate flouting of, or disdain for, the rules, and more about perceptions, communications, awareness, and the lack of respect for regulations by the Congolese themselves (see Box 4). As China is now the DRC's largest trading partner in terms of value of goods traded, and is likely to continue to increase in importance in relation to the artisanal mining sector, engagement is more and more pressing.

6.5 Pressure on minerals markets in eastern DRC in relation to 'conflict minerals'

Certification and traceability of artisanally-mined minerals in eastern DRC is a hot issue. International attention first focussed on this question in 2000/2001 during the 'coltan boom' when a shortage of tantalum on the international market boosted purchasing from the east of DRC where thousands of artisanal miners could be easily mobilized to quickly meet this short-term market demand. Due to the political insecurity in the east at that time, many mines operated under the control of various military and rebel groups and the resulting minerals became known as 'conflict minerals' or 'blood minerals' due to the coercive nature of their extraction and the fact that the proceeds from this trade were used to fund the conflict.

International attention on the issue continued in the ensuing years but it came back to high prominence in 2009 as a result of various reports such as the UN Panel of Experts⁵² and Global Witness⁵³. International advocacy and lobby groups have succeeded in gaining the support of US politicians and, as a result, the US congress introduced the Congo Conflict Minerals Act into the legislative process in 2009. This is a bill to require annual disclosure to the Securities and Exchange Commission of activities involving coltan, cassiterite, and wolframite from the DRC.

The impact of the lobby groups, the exposé reports, and the industry-led initiatives is tangible.

In May 2009, Traxys Belgium-based minerals merchant Traxys announced that it would stop purchasing tin ore eastern DRC in response to pressure from the UN. In September 2009, Thailand Smelting and Refining Company (Thaisarco) the tin smelting subsidiary of AMC, followed suit and announced its withdrawal from the market also. The decision came after public controversy and negative publicity over both companies' role in purchasing minerals from mines controlled by armed groups⁵⁴. Yet this move, too, attracted criticism as Global Witness released a statement saying "*The decision by AMC and its subsidiary THAISARCO to suspend purchases from the DRC is a regrettable move, which suggests the company is not serious about improving supply chain due diligence*"⁵⁵.

A coalition of 59 investors, representing almost \$200 billion in assets under management, issued an Investor Statement in January 2010 requesting that companies in the electronics and other industries ensure that minerals from the DRC do not enter their supply chains and the consumer products they manufacture. SocialFunds requests that companies publicly condemn the use of mineral revenue that funds the conflict in the DRC, develop policies and procedures to identify the origin of minerals entering their supply chains, work with suppliers to ensure that conflict minerals are not entering supply chains, and work with stakeholders to support strategies to end the conflict⁵⁶.

In Goma in December 2009, traders reported a 50% decline in production and processing as buyers pulled out of

Box 4: Perceptions of Chinese-Congolese relations

In terms of Congolese civil society’s perceptions of Chinese activities in the country, two concerns were raised; treatment of workers in Katanga province and lack of civil society consultation in the engagement between the Chinese and Congolese governments. In fact, the former is little different from the behaviour of companies of other nationalities in relation to how they engage and work with artisanal miners. In relation to the latter, there is now a Chinese Chamber of Commerce in Lubumbashi which has expressed willingness to engage with local partners.

None of the Chinese respondents had heard of EITI and its guiding principles. When the research team explained the principles of EITI to the respondents, all of them suggested that they would be very interested in taking part in the implementation of such an initiative. They were, however, highly sceptical of its implementation under current local operational conditions with the low standards of governance in the mining sector.

The Chinese stakeholders’ notice that Western policymakers generally perceive the Chinese presence in Africa as a challenge to transparency, a notion that is reinforced by negative reporting from the Western press. The overall opinion amongst the Chinese actors is that a great deal of what is written in the English and French language press is poorly informed and as a result, there is a strong feeling of alienation among Chinese stakeholders. In some cases this has also coloured Chinese stakeholders’ perceptions of CSR initiatives like EITI in Africa as they feel that such initiatives come across as spotlighting Chinese companies only.

Excerpts from “Chinese Companies in the Extractive Industries of Gabon and the DRC: Perceptions of Transparency”



Chinese trader buying cobalt in Katanga.

the cassiterite trade under pressure from international lobby groups. The *Association des Négociants de Minerais de N.Kivu* (AMEMNKI) reported that the number of legal *negociants* of these metals operating in Goma had reduced from 180 in 2008 to 50 this year. The lack of sales resulted in lack of funds available to finance artisanal mining activities which, in turn, resulted in reduced production. Thus a cycle was being perpetuated which was eroding artisanal mining productivity.

Some groups are lobbying for an embargo on minerals from eastern DRC if it is shown that they come from mines controlled by the military or that the minerals they produce are used to finance military activity. *Négociants* and *comptoirs* who were interviewed during the Study strenuously deny that they trade with rebel-held mines. They consider that these external actors' observations are based only on perceived negative aspects without understanding the reality in the mines, nor acknowledging efforts being made by local actors to improve governance and traceability. During the course of our research, this frustration was manifest as active hostility towards international NGOs and some foreign actors.

However, while the investigations and accusations resulted in significant resentment on the part of traders and anger in the artisanal mining community and a sharp decline in trade, it is important to note that they have also produced positive impacts. There is a wide-spread willingness to participate in certification systems to ensure access to markets, even from actors who might previously have been indifferent or dismissive.

6.6 'Conflict minerals' initiatives

There is a certain sense that the situation has swung from one extreme to another. The minerals trade in eastern DRC has gone from a situation in which there were years of criticism without any positive interventions to one in which there is a plethora of initiatives from different interest groups who all want to make a difference. These initiatives include:

- A traceability scheme for tin being implemented by ITRI (International Tin Supply Chain Initiative) with local partners in the Kivus and with co-financing from *comptoirs* in the Kivus;
- Extension into the DRC of the mineral certification system (Certified Trading Chains, CTC) established in Rwanda by the German government;
- Establishment of a regional certification system being explored by Partnership Africa Canada with the German government;
- A local, grassroots initiative by the *negociants* of Goma to trace minerals in North Kivu;
- Creation of trading centres (*Centres de Negoce*) for artisanally-mined minerals in the Kivus with a direct link to the presence of MONUC and the FARDC to ensure security in those areas;
- Initiatives to promote de-militarization of the artisanal mining areas in the Kivus by the EU-spear-headed Task Force;
- Mapping of artisanal mines and military/militia presence by the Belgian NGO, IPIS, as well as others including MONUC;
- Recommendations by the UN Panel of Experts that a roving certification body be established;
- Establishing criteria for 'due diligence' for companies by the OECD;

- Research and recommendations by consumer industry groups including RESOLVE; GESI; EICC; BSR; and MakeITFair, amongst others.

More detail on these initiatives is given in Figure 3 which attempts to show in schematic form how some of these various initiatives fit together. This is accompanied by Table 8 which gives more detail. The Center on International Cooperation (CIC) convened a discussion group in December 2009 entitled: “*Practical Mechanisms to Combat the Militarization of Natural Resources in the DR Congo.*” The resulting report provides a good summary of the position of NGOs and the initiatives. These initiatives focus on three primary routes to addressing the problem: due diligence, certification and reinforcing local institutions:

- *“Due diligence, as proposed by Global Witness and ENOUGH, advocates making companies responsible for determining the conditions under which minerals are mined and brought to market. Under an international regulatory framework, companies would have to carry out rigorous internal audits to document their entire supply chain, and an independent international monitoring mechanism would be set up to verify their compliance.*
- *While companies could begin conducting such audits immediately, absolute certainty could only come through comprehensive certification of minerals at the source. Bags of minerals would have to be sealed at the mine and labelled so that traders, auditors and international mining companies would be able to distinguish between legal and illegal product.*
- *The reinforcement of local institutions, as recommended by Resource Consulting Services in their CASM reports, would help Congolese institutions to fulfil their mandates. These institutions remain weak and susceptible to political manipulation, conflict of interests, corruption, and intimidation from armed actors and military units themselves.”*

In their 2010 report RESOLVE note adds two further aspects to this list. First is the need for supporting livelihoods and economic opportunities for miners and the second is that “*transparency and accountability must extend across borders to include other governments in the region*”⁵⁷.

6.7 Challenges for implementation of the initiatives

Transforming the willingness on the part of local, national and international actors into a concrete and credible system of traceability and certification will require considerable effort. There are myriad challenges:

- At this point, the initiatives lack sufficient coordination to ensure that there are neither gaps nor duplication. There is a lack of understanding of the difference between traceability and certification systems and why ITRI, BGR and PAC should all be promoting different systems. It is very important that the institutions driving and supporting these initiatives work together to present a coherent plan to the DRC government and the other actors in the trade showing synergies, progressions, points of merging, etc.
- Any intervention which changes the current trade dynamics is going to represent a financial loss to some actors. If these actors are powerful, they will have the ability to block, disrupt or sabotage the initiative. Understanding the perspective of all stakeholders and finding ways to introduce change in a way which does not stimulate yet more conflict is essential. A strong, influential, local constituency of support in each stakeholder circle will be a critical element of success.

- There is considerable pressure for initiatives to start at Bisie as this is: (a) the mining area which accounts for some 70-80% of the cassiterite going through Goma; (b) it is a mine which attracts considerable media and NGO attention; and (c) it is politically sensitive. However there are major logistical constraints to working in Bisie, not least that accessing the site requires a 10 hour walk each way from the airstrip to the mine. Other mines have similar problems and, while the porters, miners and *négo-ciants* have become used to this, getting staff, observers, auditors, etc, to these mines is challenging. Targets must not be overly ambitious in the early stages of projects. Budgets must be realistic.
- External actors sometimes think that these initiatives are starting from scratch, but this is not the case. There are already at least five documents which accompany each shipment of minerals (the *Authorisation de Sortie* of SAESSCAM; the *Attestation de Transport of the Division des Mines*; the *Fiche de Tracabilité* of AMEMNKI; the *Bonne d'Achat* of the CEEC; and the *Fiche de Production* of the *comptoirs*) just to the point of the *comptoirs*. Every new initiative is asking for more paperwork, tags, etc, to be added to the system. If this is to be feasible, a major investment in local government agency capacity and resources is needed. For example, at present, SAESSCAM has only three agents at Bisie. There complement of staff there will need a major increase if they are to actively participate in the new traceability and certification projects proposed. Donors must consider this in terms of logistics, mandate and budget.

Figure 3: "Conflict Mineral" Initiatives

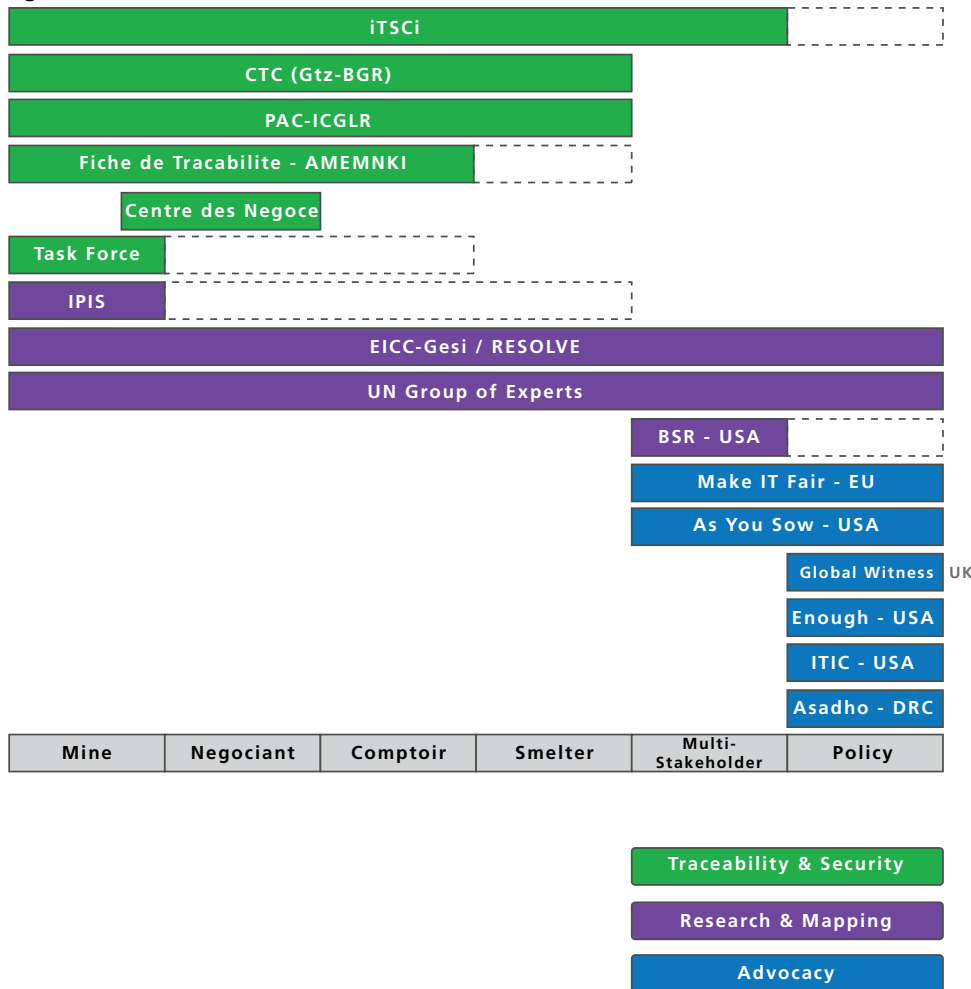


Table 8: “Conflict Mineral” Initiatives and potential roles for PROMINES

Initiative	Objective	Lead actors	Mineral	Timeline	Location	Notes	Potential role for PROMINES
Phase 2 of iTSCI (International Tin Supply Chain Initiative)	Traceability of minerals from eastern DRC to ensure they do not come from rebel held mines	ITRI (tin industry), Dutch government, end-use buyers, local partners in the Kivus	Cassiterite	Piloting in March 2010, full roll-out by end of 2010	Bisie, Walikale, North Kivu, sites near the MONUC Centres de Negoce; two sites in South Kivu, possibly Lulingu	Will operate in co-ordination with the Centre des Negoce; Phase 3 to address social and working conditions at mine level	Support capacity building of local partners, particularly government services and BEGEM; Assess Phase 2 with a view to recommending the continuation, expansion, merging, or abandonment of the system; Accelerate Phase 3 of the system which focuses on social, environmental and work conditions at mine site;
Certified Trading Chain (CTC)	Assessment, ranking, and improvement of working conditions, human rights, environment, at mines	GTZ, BGR	Stanniferous metals	Piloted in Rwanda in 2009; will begin in DRC in late 2010	Central Africa	Potential to do worker training related to Phase 3 of iTSCI. Potential to replace, collaborate, or merge with ITRI	Determine role when recommendations are made available and relationships between various systems are more coherent;
Regional Certification Systems	Regional certification	Partnership Africa Canada (PAC) & International Conference on the Great Lakes Region (ICGLR); Switzerland, Canada, & Belgium		Presentation to government and industry in April 2010. System in place by end of 2010	DRC, Rwanda, Burundi, Uganda	Organizers assume a regional system will replace other systems over time.	Determine role when recommendations are made available and relationships between various systems are more coherent;
Fiche de Traçabilité	Traceability	AMEMNI (grassroots effort by the négociants of Goma)	Cassiterite, coltan, wolfram	Began in late 2009	Goma, Walikale, NK. Expansion underway.	Could become part of ITRI and/or ICGLR system	Provide equipment and training to enable this system to become more formalized as a second database for comparative purposes and MER on the ITRI and/or ICGLR system (recommendation by PAC);

Continued.

Centres de Negoce	Secure market for artisanally mined products (implies traceability)	MONUC, IOM, DRC Government	Cassiterite, coltan, gold	Within the first six months of 2010	To be confirmed: Bihambwe, Masisi, Isanga, Walikale (North Kivu), Tukola, Kamituga, Lulingu, (South Kivu)	Co-ordinating with ITRI.	Facilitate local consultation with artisanal mining and trading community; Support participative definition of roles, responsibilities, and mechanisms with a particular emphasis on the role of negociants and the unintended consequences which their effective removal may have; Support capacity building of government actors; Support mineral tax transparency and the 'guichet unique' system at the Centres and their catchment areas;
EU Task Force	Demilitarization of mines & promotion of legal trade	Task Force			Eastern DRC		Participate in meetings and advise on technical mining issues
IPIS	Mapping of conflict & mining	IPIS, local NGOs, local government agents	All	Flexible	Butembo, Goma, Bukavu, Uvira	Working on Oriental data. If funded, could work in Kivu. Willing to transfer data to government in line with Item 2 of the Task Force resolutions	Fund IPIS as a technical capacity building partner for SAESSCAM; Fund program to build local civil society capacity for independent verification; Facilitate regular exchange with FARDC/MONUC on findings and progressive reduction of military control of mines; Facilitate agreed definitions and grades of 'military control' so that sites can be accorded correct status and progress can be monitored;
UN Group of Experts	Research links between conflict and resources in DRC	UN Group of Experts			DRC	Made recommendation for roving certification body	Work with the Panel to ensure that the proposed 'mitigation' (progressive improvement) approach is viable in the field

Continued.

RESOLVE; GESI (Global e-Sustainability Initiative); EICC (Electronics Industry Citizenship Coalition)	Map electronics supply chain; research; stakeholder engagement; promote transparency	RESOLVE, GESI, EICC	Cobalt, tin, tantalum	Report published in March 2010			Participate in meetings; advise on technical mining issues and the reality on the ground; find synergies with initiatives
MakeITFair	Reports on metals from DRC in consumer electronics	MakeITFair		Meeting 2010	EU		
BSR (Business for Social Responsibility)	Research & dialogue	BSR		Conference 2010	USA	Conference in Washington DC in May 2010	
OECD Due Diligence Criteria	Establish due diligence criteria for mineral buyers and users to end sale	OECD, industry	All	To be agreed in September 2010	Paris, Nairobi	Criteria will be established for all actors from mine to final consumer sales	Participate in the establishment of criteria notably in relation to operating conditions in mines and levels of legitimate military presence for security purposes

- Even large scale initiatives regarding traceability, such as the Kimberly Process Certification Scheme (KPCS) face significant challenges to ensure that non-eligible minerals are not introduced to the system. Whilst this will be easier with heavy and bulky minerals such as cassiterite in comparison to the highly portable and easily hidden diamonds, the loopholes and potential for minerals to enter the system (by coercion, bribery or force) will be significant.
- The focus is on military control of mines which means that little up-front attention is being paid to actual conditions in the mines. This means that even if 'conflict-free' minerals can be guaranteed, all the elements of health, safety, environment, child labour, etc, still need to be addressed. Failure to include these elements early on (not just in the later stages) will inevitably attract continued NGO criticism which may undermine confidence in, and the positive impact of, the initiatives. The complex discussion of agreeing criteria (and the progressive steps by which to reach them) needs to start at an early stage. and needs to be built into pilot projects, recognizing that this will be when people may start to resent interventions. It is one thing to put a no-cost tag on a bag at point A and to check that it arrives at point B. It is quite another to start excluding people on the basis of their legal status, age, working conditions, etc.
- Some of the international initiatives are working intensively at a distance without a very strong connection to the field and to actors there which means that: (a) Congolese actors feel disenfranchised, and (b) the initiatives do not benefit from having first-hand local knowledge and participation.
- Many external actors fail to understand the complexity on the ground and to consider the enabling environment which is needed for initiatives to succeed. Much depends on the capacity of state agents to do their job, assurance that they are being paid, breaking out of old systems, etc., and all of this takes considerable time, effort and resources. Success of the initiatives will require a willingness to accept some compromises on the understanding that they are steps (potentially slow ones) towards an ideal system.
- Expectations are high and causal links are sometimes assumed to exist when they do not. Even if the initiatives succeed in their individual objectives, this may not impact on the fundamental dynamics and drivers of resource conflicts in eastern DRC. Some profound changes are needed which are far beyond the control of the actors pushing for traceability and certification. Indeed they will need national and regional policy, effort and resources on the part of governments.

As this is a rapidly evolving situation, assessment of the status and likelihood of success of each initiative is somewhat redundant, however, there are some guiding questions that should be asked to analyse the various initiatives as early as possible in their inception. Such questions might include:

- What is the rationale that people will participate in the initiative? Why would artisanal miners and traders in the DRC change their current trading patterns to participate in this initiative? Are the perceived benefits that the initiative claims the actual incentives that the miners and traders want and need?
- What evidence exists to show that the initiative will work? Are there other examples of this elsewhere and have the lessons from these other initiatives been included in the project consultation and design process?

- Is there a clear and logical causal link between the activities and the impacts? For instance:
 - Certain projects claim that the provision of a new trade mechanism or site will improve working conditions and reduce child labour in the mines but how this will come about is not clear.
 - The implication that through the correct application of due diligence and/or tracking and tracing and/or visible trading mechanisms, the mineral trade can be de-militarized to produce a positive impact on the problems of insecurity in the region has not been logically explained⁵⁸.
- Who has been involved in the project consultation and design process? Have their specific interests influenced the project in their favor to the detriment of the interests of others?
- What are the risks to the miners and traders if they participate? Has a thorough risk analysis been carried out to consider the potential negative consequences of disrupting the current trade and vested interests? Has the project considered not just risks that it might face, but also those that it might create?
- How is 'military control' defined? Is the objective to exclude FDLR or other militia controlled mines only? Will mines which pay tithes (in minerals and/or labour) to the FARDC be included or excluded? Who will check up on all the status of these (thousands of) mines? How will the behaviour of the Police be monitored so that they do not become part of the extortion system?
- Is there a clear component of independent, civil society monitoring and public reporting involved in the project?
- Does the project make a realistic estimate of the scale of the trade and of its subsequent investment? What are the infrastructure, logistical and transport capacities for the initiatives to operate in widely dispersed mining areas? The sheer volume of material moving from some sites (for example, cassiterite from Bisie) will potentially cause stockpiles, backlogs, and all related logistical problems for the new initiatives.
- How will the project ensure that the taxes collected actually flow into the legal state treasury? Is there a risk that the project will facilitate further corrupt activity? Is the project linked to capacity building for financial management and traceability?
- Are the larger impacts on other minerals fully understood. For instance, will constant emphasis on cassiterite and coltan eventually drive illegal actors to turn more to gold which is even harder to control? As the gold mines are an FDLR stronghold, any attempts by others to take



Cassiterite drums awaiting export, South Kivu.

over these sites may lead to renewed violent conflict. Has this been considered?

6.8 Suggestions and comments from the field

Strengthen the legal trading routes

Two main suggestions came from the field in relation to strengthening legal trading mechanisms. The first was to speed up and increase the efficiency of issuing traders cards. The second was, particularly in relation to gold, to increase the number of official *comptoirs* available. The major lack of legal outlets for selling gold was considered to be a key factor in facilitating the illegal trade.

Provide resources to improve knowledge of mineral grades and prices

All artisanal miners and many traders were very keen to have access to equipment which can grade their minerals to ensure they are getting a better price. This could be possible through the *Centres de Negoce* and the Artisanal Mining Zones. It could also be a service of SAESSCAM. Others proposed systems to give the daily market price to miners and traders via telephone.

Support initiatives which increase access to markets

There was widespread support for the traceability and certification initiatives in principle. People are very anxious to maintain their access to markets however certain reservations were expressed and recommendations were made to PROMINES. First, PROMINES should ensure good coordination between all of these initiatives as there is much confusion about their objectives and actors are being asked to participate in several projects at the same time. Second, PROMINES should ensure that the state agents who have to play key roles in these projects have the resources to do so. Third, PROMINES should communicate clearly about the complexity of the situation on the ground and the potential negative impacts of initiatives which do not fully understand this. And fourth, PROMINES should bring the international actors to the table in the DRC where local actors who are currently excluded from the remote debates can represent their opinion and the realities in which they operate.



In this chapter:

- 7.1 The artisanal mining tax regime
- 7.2 Provincial disparities
- 7.3 Unofficial 'taxes'
- 7.4 The regional tax environment
- 7.5 Suggestions and comments from the field

7.1 The artisanal mining tax regime

The categories of tax applicable to artisanal mining and trading are laid out in the Mining Regulations. The Mines and Finance Ministries, through an Inter-ministerial Decree, jointly determine the rate, the base and methods of collection of the duties, taxes and fees applicable to small-scale miners, to dealers and to approved trading post as well as the applicable penalties for contravention. The legal taxes applied to the artisanal mining sector are shown in Table 9⁵⁹.

Table 9: Summary of taxes in the artisanal mining sector⁶⁰

Category	Tax	Value	Service
Artisanal miner	Artisanal mining card	\$25	DGRAD (Direction Générale des Recettes Administratives, Judiciaires, Domaniales et de Participation)
	Entrance fees for reagent	2%	OFIDA (L'Office des Douanes et Accises)
	Tax on turnover (ICA) in the import of equipment	13%	OFIDA
Trader	Traders card	\$1,000	DGRAD
Exporter	The anticipative annual fees to be paid during the approval/renewal of the trading post	\$200	DGRAD
	Mineral exit tax	?	OFIDA
	Tax on turnover (ICA) of the export	3%-13%	DGI (<i>Direction Générale des Impôts</i>)
	Remuneration tax for the intervening services	1%	DGRAD
	Foreign work permit		DGRAD
	<i>Agrément acheteur</i>	\$500	DGRAD
	"Common interest" taxes due to the Decentralised Administrative Authority (EAD)	1%	SAESSCAM

The 1% levied by SAESSCAM is, in principle, managed as a '*quichet unique*' meaning that SAESSCAM collects the tax on behalf of certain services and then it is divided between them as follows (based on information from SAESSCAM Kolwezi):

- SAESSCAM: 30%
- The Mayor (or local authority): 30%
- *Bureau des Mines*: 20%
- Co-operatives: 10%
- Fond de Promotion des Petites Mines (FPPM): 10% (this is, in principle, a fund to help with the development of the sector and the purchase of equipment for SAESSCAM)

In Butembo, a different tax distribution regime is used by SAESSCAM. They levy 10% on the artisanal miners which is destined for:

- 35% *Provincial Gouvernor*
- 25% SAESSCAM
- 10% *Division des Mines*
- 10% *Territoire*
- 10% *Collectivité*
- 5% *Police des Mines*
- 2.5% CEEC
- 2.5% *Groupement* (source of the minerals)

There are other taxes which are also applicable to the artisanal mining sector. A tax called the *Droit Superficiaires Annuels par Carré* is paid by everyone who holds a mining title and is payable by *carré* to the *Cadastre Minier*. CAMI retains 50% of this and then is obliged to divide up the income received between a range of different mining services as follows:

- *Direction des Mines*: 8%
- *Direction de Géologie*: 9%
- *Direction chargée de la Protection de l'Environnement Minier*: 6%
- *Direction des Investigations*: 3%
- CTCPM: 3%
- *Commission Interministérielle d'Adjudications*: 1,5%
- *Commission Interministérielle chargée d'approbation des listes*: 1,5%

- *Comité Permanent d'Evaluation*: 2%
- SAESSCAM: 16%

Of particular note here is the 16% which should be paid to SAESSCAM of which 10% is destined for communities around artisanal mining areas. None of the SAESSCAM offices to whom we spoke had received these funds for their operations or for community investment.

Whilst the CEEC does not receive monies from the *droit superficiaires annuels par carré*, it is entitled to 65% of the 1.25% tax levied on the exports of artisanally-mined diamonds and gold, and the same of the 1% tax levied on coltan exports.

One of the biggest sources of 'tax' is the product share demanded by the State Owned Enterprises from the artisanal miners working on their sites, sometimes 30% of all production.

7.2 Provincial disparities

There are Provincial differences in the tax regime. In May 2009 a new provincial export tax of 3% on artisanal mining products was introduced in North Kivu, along with the system of '*guichet unique*' which should amalgamate the various taxes into one single payment. This was not immediately applied and trading firms continued to pay the legal 1% tax and, at the same time, several state bodies unilaterally raised their taxes, leading to confusion. The Pole Institute quote a letter from the North Kivu Mineral Traders Association ANEMNKI to the provincial government in September 2009 saying that "*we are unable to exercise our functions due to the multiple taxes we are due to pay and which never remain stable, variations occurring on a daily basis without motive or cause*"⁶¹.

One problem with this is that the process of managing a '*guichet unique*' has many challenges and disadvantages the Provincial government, as all payments are made to Kinshasa and the Provincial percentages (40%) are not properly retroceded. Thus the provincial governments seek ways to levy their own taxes outside the new structure⁶². This is not, however, coordinated between the provinces and this lack of coherence has a direct impact on artisanal mining and trading as significant amounts of artisanally mined materials move between provinces. For example, IPIS reports that in the case of wolframite more than 90% of the quantity officially exported from Goma originates from Maniema⁶³. However, in October 2009, the provincial government of Katanga imposed a tax of \$5 per kg on cassiterite leaving the province. This was part of an initiative to build the cassiterite sector in Katanga however, prior to this most Katangan cassiterite was sent to Maniema and South Kivu. At the time, the price of cassiterite was depressed and only trading for around \$7-8 per kg, therefore the tax was prohibitive for internal trade with a direct impact on the production from the other provinces. This is penalized producers in northern Katanga who could not sell their product, as well as impacting negatively on the buyers in South Kivu who used to handle this material and depended on it for their output. The result was that the transfer of Manono cassiterite to the trading houses of Bukavu and Goma was dramatically reduced and that possibly more material moved from the official circuit to the unofficial one in order to avoid this prohibitive tax.

7.3 Unofficial 'taxes'

In 2010, Pact carried out a survey of artisanal miners in Kolwezi and found that less than 3% actually pay the required, legal taxes in the artisan mining sector and less than 4% knew all the required, legal taxes⁶⁴. This study also looked at unofficial tax payments and found artisanal miners regularly being required to pay, amongst oth-

ers: taxes to enter and leave the mines; payments to work in the actual pits; payments to have their minerals registered; the police; the Guard Industrielle of Gecamines; and the traditional chiefs.

In other sites, there are other actors who also demand payment. In Bisie, for example, taxes are levied by: the association of *'negociant ambulants'*; the association of porters; mine security at barriers; the association of air transporters; and the FARDC. These are over and above the payments to the *Bureau des Mines*; SAESS-CAM; CEEC; the police; ANR; DGM; DGI; and the Provincial authorities including the *Gouvernorat*. Added to this are the payments to the traditional and local authorities including the Territory, *Collectivité*, and *Groupement*.

The taxes paid to local authorities can be extremely high. In one mine visited by the team, the following was reported:

- The miners pay the production of 2 hours work per week to the FARDC;
- They pay the production of 2 hours work per week to the *Chef de Groupement*;
- One full day's work per week has to be given to the Mwami;
- 30% of each day's production has to be given to the Mwami;
- Each trader pays US\$5 per month to the Mwami as a licence to trade.



Gold mine being dug, the investor had spent \$1,500 to develop the mine this far.

7.4 The regional tax environment

The broader tax environment is also of great importance to artisanal mining and trading. The Congolese tax regime does not favour or foster legal exports. Rwanda levies no export tax on minerals while the DRC's export tax is very high (exporting a container of tin ore from Rwanda costs \$200 in taxes, while exporting the same container from the DRC costs \$6,500⁶⁵) and this creates an incentive for illegal trade. Mthembu-Salter postulates that "one of the reasons that export taxes are so high is related to the difficulty the Congolese state has in collecting domestic revenue which leads to an over-reliance on international trade taxes, such as the cassiterite export tax, which are easier to collect. The problem is that this is a disincentive to legal exporters. It may also be that the authorities rely disproportionately on those who pay their legal taxes to make up for the lost revenues of those who do not"⁶⁶. This theory is echoed by the large-scale mining sector where industrial mining companies complain of excessive taxes levied on those companies who aim to act in a legal and transparent way, while many others choose the route of bribery and evasion and seem, nonetheless, to thrive. Whatever the driver, there is a widely

acknowledged need for the Great Lakes countries to move towards harmonization, or mutual reinforcement, of their respective tax regimes if legal, regional trade is to be promoted.

There is no doubt that artisanal mining and trading makes a significant contribution to the DRC government through taxes. The fiscal contribution of the trade in cassiterite, coltan and wolframite from eastern DRC was estimated as US\$4 million in 2008⁶⁷. However, looking at the lists of unofficial ‘taxes’ that are paid, it is clear that a far greater percentage is going astray or being collected illegally.

7.5 Suggestions and comments from the field

Listing the requisite parameters and actions needed to improve tax revenue to the state, reduce predatory and opportunistic taxation of artisanal miners, and thus ultimately to reinvest revenue in the artisanal mining sector and the community at large is a relatively simple process:

- The legal taxation regime needs to be disseminated including the roles and responsibilities of legitimate actors;
- Illegal actors need to be removed from the mines and those found to be extorting illegal taxes need to be penalized;
- Legal actors need to be trained, provided with appropriate resources to do their jobs, monitored, paid, and penalized for infractions;
- The tax collection systems need to be streamlined, communicated, and implemented efficiently and transparently with due consideration to the logistics of doing this in remote mining areas with poor infrastructure;
- The provincial taxation regimes need to be harmonized to ensure that they collectively deliver national benefit and do not compromise the internal flow of minerals;
- The financial management systems need to be in place to manage the funds along with the appropriate training and reporting mechanisms;
- The retrocession of taxes to the provinces needs to be efficient, accurate, transparent and timely;
- On receipt of retroceded taxes which are destined to the communities around the areas from which the minerals came, the provincial authorities need appropriate plans on their use and public communications mechanisms to ensure the population understand how they are being used;
- Mechanisms by which civil society can monitor the process need to be established or reinforced;
- The national fiscal regime needs to be harmonized with those of neighbouring countries such that there are motivations for observing the legal system and diverting more minerals into the official circuit.

However, this is a long wish-list of actions which will take significant time, effort, resources to implement by the government with multiple donors. Just as with issues such as demilitarization of the mining areas, there is a larger picture and complex dynamics to consider. The objective of this study is to report the priority areas identi-

fied by artisanal mining stakeholders and to define what role PROMINES can play in contributing to an overall improvement in the fiscal regime as it pertains to artisanal mining.

The following practical steps were proposed during the consultation process:

- Disseminate (in appropriate local languages and using appropriate media) the legal tax regime, the official actors, and their roles. These need to be posted at mine sites, depots, *maison d'achat*, *comptoirs*, etc.
- Define clearly the role of SAESSCAM, determining and improving their capacity and needs to fulfil this role, providing training, monitoring progress, penalizing those who abuse the system;
- Develop a way of separating SAESSCAM's dual and often conflicting roles of both tax collection and technical assistance such that both are carried out in a professional manner, not one at the expense of the other as is often the case at present
- Determine if SAESSCAM's mandate for 'integrated development' is appropriate and, if so, ensuring that a viable budget is allocated to these activities such that SAESSCAM can be seen to deliver benefits to the community as well as collecting taxes. The same applies to the '*Fond de Promotion des Petites Mines*';
- Standardise the *guichet unique* mandate of SAESSCAM and the systems for collecting and distributing those taxes. Clearly, the fewer authorities involved in tax collection the easier it is to monitor the system;
- Overhaul the tax reporting system for artisanal mining sites, trialling this at pilot sites, refining and expanding throughout the sector;
- Ensure that SAESSCAM agents at site are paid to remove at least one motivator for corrupt practices;
- Support a transparent reporting and transfer of funds from the *Droit Superficiaires Annuels par Carré*, specifically in relation to the 16% for SAESSCAM and the 10% for communities;
- Work with local authorities to remove illegal actors from the mine through simple, viable monitoring systems and credible penalties;
- Take a holistic view of interventions and changes in the artisanal mining sector in order that new initiatives are not simply seen as a new opportunity for taxation (e.g. tags on sacks related to traceability systems) but that, at the same time, they are returning revenues to the state if that is appropriate;
- Support the creation of a civil society network around artisanal mining areas who can act as monitors of corrupt tax practices, including some safe recourse for the miners and traders themselves to make complaints



SAESSCAM collecting artisanal mining taxes.

Chapter 8: Negative Externalities of the Sector in DRC



In this chapter:

- 8.1 Child labour
- 8.2 The role and security of women in the artisanal mining sector
- 8.3 HIV/AIDS, STDs and other health issues
- 8.4 Environmental degradation
- 8.5 Suggestions and comments from the field

Whilst the title of this chapter is entitled 'Negative Externalities', the Study wishes to highlight that the issues found in this chapter are an integral piece to improving the functioning and reputation of the artisanal mining sector in DRC. The issues raised below are not necessarily external impacts, nor by-products, of the current artisanal mining sector. Rather they are inherent, internal, social impacts resulting from the lack of governance, as well as cultural perceptions regarding labour, valuation of the environment, and role of women. Whilst these are issues pervasive across the DRC, they are heightened in the case of the artisanal mining sector due to the migratory, opportunistic and relatively self-governed manner in which this economic activity takes place.

8.1 Child labour

Large numbers of children and youth under the age of 18 years work in the artisanal mining sector in the DRC despite this being prohibited by Congolese law and the UN International Labor Organization (ILO) Convention No.182 on the Worst Forms of Child Labor (1999) which the DRC ratified in 2001.

Under the ILO Convention, the worst forms of child labour include:

- Slavery and practices similar to slavery, such as the sale and trafficking of children, forced or compulsory labour, debt bondage and serfdom;
- Child prostitution or child pornography;
- Use of children in illegal activities, such as drug trafficking;
- Work which is likely to jeopardize the health, safety or morals of children.

In some mines visited during the course of this Study, up to 40% of the workers on any site could be considered children (acknowledging that it is hard to tell exact ages for teenagers between 16-19 years of age). Children and young people work in all aspects of artisanal mining in the DRC including:

- Mining, sometimes being used in narrow tunnels which they can access more easily than adults due to their small size;

- Hand-picking and sorting minerals which have been dug by others or are obtained from tailings or other accessible deposits;
- Transport of materials, including carrying heavy sacks on their heads, shoulders and backs;
- Processing of minerals including crushing rocks, sieving crushed powder, washing minerals, and amalgamating gold using mercury;
- Trading minerals;
- Transporting goods and trading them in the mines;
- Providing services in the mines and camps which can include prostitution (in the Study, girls as young as 12 were identified as working as prostitutes).

The impact of this work on their education, health, welfare, and future opportunities can be devastating. Exclusion from school limits all their future choices and opportunities. Heavy labour is particularly damaging to growing bodies and bones, and exposure to minerals, dust, chemical and radioactivity can have an even greater negative impact on children than on adults.

The lifestyle associated with many mining areas means that children and young people are exposed to alcohol, drugs⁶⁸ and promiscuity, including the resulting sexually-transmitted diseases, from a very young age. Children in the mines are also at increased risk of being victims of violence, particularly as there may be low levels of moral responsibility in certain artisanal mining communities as a result of alcohol and drug abuse, dilution or



Child washing cassiterite, Bukavu, South Kivu (Left); Child hand picking copper in Katanga (Right).

Box 5: Drivers of child labour in the mines of Kolwezi

Pact conducted a study in 2007 to identify the key components for sustainable economic growth and peaceful transition from ASM to LSM in Kolwezi. The study, funded by IFC Comm. Dev., USAID and four mining companies, revealed several unique characteristics of child mining in Kolwezi, given its semi-urban nature. Understanding dynamics such as these is extremely important if initiatives for change are to be effective.

- 68% of the surveyed child miners attended school full-time (7am-noon or 1pm-5pm), and additionally dug in either the mornings or afternoons. This same percentage of children also admitted to digging on the weekends or holidays.
- 40% of the children surveyed have fathers who are employed in Kolwezi and 20% have fathers working in the mines. An additional 10% also have mothers who are employed.
- 43% of the children surveyed admitted that their friends heavily influenced their decision to mine after school or on the weekends, indicating that drivers stem strongly from a lack of alternative activities like sports, and after-school clubs, and the boredom that ensues as a result.
- Over 90% of the children surveyed had been mining for less than one year.

loss of family and traditional values through migration, and other factors. In some of the most extreme circumstances observed, the Study was informed of incidents where children as young as three years of age were raped by artisanal miners either under the influence of 'fetish' or witchcraft which told them that this would increase their chances of finding minerals or as a result of hearing rumours that this would protect them against, or cure them of, HIV/AIDS.

There is no doubt that working in artisanal mining compromises the future of children and young people.

The reasons why children work in mining in the DRC vary considerably. From a young age, infants and very small children may be brought to the mines because their parents (notably their mothers) work there. Children who spend their early years in the mines quickly become habituated to it and their transition from playing on the edges to starting to work may occur almost un-noticed or through assumption that that is the natural course of events. In many cases, they work in the mines through economic necessity, either to contribute to their family income or for personal survival if they live alone. In some cases, children may be forced to work if a mine is under military control or if they have to service a debt which their parents incurred. Many mining areas are remote and have very limited, if any, education facilities therefore children have few possibilities to go to school instead of working, even if they could afford it. In other (rare) cases, some children choose to go to the mines for social and personal reasons (see Box 5).

No parents want to send their children into tunnels in the mines. However, in some cases, parents consider that there is little likelihood of future employment in alternative sectors therefore they feel that the best thing they can do for their children is to let them 'learn the ropes' and establish themselves in the artisanal mining system early on. Other parents consider that the associated activities around mining are perfectly acceptable and

therefore they do not consider transport, mineral washing, etc, to be part of 'mine work'. There are also cultural considerations which may mean that little emphasis may be placed on education for girls therefore it may be assumed that they should start to work as soon as they are able on light tasks related to minerals or provision of goods or services.

One of the issues most frequently cited as being a problem is that 18 is considered to be an unreasonable age limit for young men who want to work in mining. Typically, 15 years is considered by the artisanal mining community to be an appropriate age to start the heavy work directly in the mine.

Various projects have been carried out to try to address child labour in specific mining areas of the DRC. These include:

- Transition into schooling and alternative work for child miners around Lubumbashi was carried out by Belgian NGO Group One, the ILO and the United Nations Children's Fund (UNICEF);
- Reinsertion of artisanal miner children into school using Community Child Protection Networks (RECOPE) was carried out in Kolwezi, Mbuji Mayi and Ituri by Save the Children and the Solidarity Centre with funding from the US Department of Labor;
- The Diamond Development Initiative (DDI) has a pilot project called 'Tukudimuna' which aims to remove 700 children in the age range of 14-17 from the diamond mines of Kasai and to integrate them into a specially designed educational programme that will allow them at the completion to opt for higher education, or to take advantage of other viable economic opportunities.

Other, local level efforts have been made by various actors. Whilst the early rate of success of the projects is often good, maintaining the impact can often be a challenge. It is clear that the success of such projects depends on



Children at a copper 'laverie' in Katanga.

many factors, not least of which is a thorough understanding of the drivers which cause these children to work in the mines and a comprehensive and integrated set of approaches to resolving the problem and the context in which it occurs, rather than single-intervention to address the symptom.

There are significant challenges for PROMINES to try to find entry points to address child mining in artisanal mining as a general issue in the DRC given that there is a huge socio-economic shift required in the operating environment to reduce the drivers for child labour. This is beyond the capacity and scope of PROMINES. However it should and will be possible for PROMINES to include the reduction of child labour as an element of activities in all pilot projects, as well as to improve knowledge of the law and the capacity of state agents to enforce it. It will also be possible and important for PROMINES to link with other donors and initiatives which address child labour, access to education and livelihood alternatives to ensure that the artisanal mining community is specifically included in their work.

8.2 The role and security of women in the artisanal mining sector

Women have equal right to work in mining under DRC law and the country's constitution, though various provincial and mine level instruments and norms exist which curtail their ability to access equal opportunities. This is a direct result of cultural perceptions about what constitutes acceptable work for the genders, discrimination against women, and a 'cornering' of the market by men.

Despite these barriers, women strive to work in all aspects of artisanal mining in the DRC, though in the majority of cases under different standards and with different levels of compensation compared to their male counterparts. Cultural standards often dictate that women are paid less than their male counterparts or they may get paid in reject material to process for whatever they can recover.

It is rare, to find women digging in the mines unless these are tailings, low grade waste areas, or quarries. Instead, women are more involved in transporting materials, processing the ore and trading. There are also a small but significant number of women working as traders of artisanally mined products. In some cases, they are very successful and may control significant sections of the market, holding positions of power that are comparable to their male counterparts. During the course of the Study and based on previous research, the team met with women who managed mines, who financed and invested in mines, who owned and managed *laveries* (washing sites), and who worked as small and medium-scale traders.

Restrictions on access to mines for women is a major source of contention, and perpetuated by cultural belief. For instance, in Katanga, women are not permitted access to some mines, both by local law (enforced by mine owners and government agents) as well as by customary traditions. In many mines, the miners believe that the presence of women in the mines will cause the minerals to disappear and therefore they are forbidden entry, even extending this to visitors. In one example, a woman was the owner of the mine as well as the Chief of the Camp. She could access the mine only once per year after a special ceremony to the ancestors. A traditional belief of local miners in neighbouring CAR is that diamond mining is naturally mystical and can render women sterile⁶⁹.

One of the main sources of income for women in and around artisanal mining is the provision of goods and services to the mines. This includes trading in consumable goods, running restaurants, as well as providing sex services. Some women choose to move to the mining areas to work in the sex trade as they know they can make a significant amount of money in a short space of time. Some hope that they will secure a husband in the mines.

Others are sent to work as prostitutes to earn money for their family and may be replaced by a sister if and when they fall pregnant. In some camps that were visited during the course of the Study, it was found that the men in the mines visited a prostitute more than once per day and payment for sex was one of their biggest financial expenditures. There was also a complex payment system in place which meant that sex with favoured 'girlfriends' was more expensive than casual encounters and that the price for services increased proportionally with the level of gold being produced in the mine.

In some artisanal mining areas, there is a high risk for women of being subject to sexual and gender based violence (SGBV). Several drivers explain on-going violence including: remoteness of mine areas where lawlessness is common; high number of ex-combatants now working in mines, and thus perpetuating war-time practices; increased numbers of state and non-state security actors around the mines who are increasingly responsible for perpetrating SGBV; levels of drug and alcohol consumption around sites which exacerbates violent tendencies as well as diminishing moral responsibility

These are all however potential drivers to explain the on-going violence perpetrated against women. Compounding these is the culture of impunity regarding SGBV in the DRC which is one of the main long-term causes of on-going violence in communities, coupled with informal settlement schemes that allow victims' parents to be compensated in cash or in-kind (animals) for the rape of a daughter. The judiciary is ill-equipped to prosecute such cases, and once the woman's reputation has been defamed, the monetary burden she represents to her family (as she is no longer eligible for marriage) makes out of court settlements more attractive for households. Until such practice is halted and impunity no longer exists, SGBV will continue to occur within the periphery of mining communities.

8.3 HIV/AIDS, other STDs and health issues

The combination of male dominated camps, large numbers of young men far from home and family, a rapid daily turnover of cash as well as a lifestyle in which alcohol and drugs figure at a high level, all contribute to prostitution being a major feature of many artisanal mining areas. The high level of promiscuity along with poor, if any, health services and a lack of sanitation and hygiene all contribute to high levels of disease and health problems in the camps. HIV/AIDS awareness is low and prevention tends to rely on superstition rather than behavioural change, condoms, testing, counselling, etc. In some mining areas there are also high numbers of current and demobilized soldiers and this creates another risk given the elevated levels of HIV/AIDS infection in this group.

All of these factors contribute to artisanal mining camps and areas as being high-risk sites for potentially increased levels of HIV/AIDS infection as well as likely hubs from which increased rates of infection might disseminate. Despite this risk, there are, as yet, hardly any HIV/AIDS programs in the DRC which focus specifically on prevention within the artisanal mining community. The only project that the Study found which identified this group for particular attention was carried out by Pact and local partners with funding from USAID to provide a mobile Voluntary Counselling and Testing (VCT) clinic to the Kawama artisanal mining zone in 2008.

Other health risks associated with working in and around artisanal mining areas include:

- Occupational health risks of mining including physical strain and injury; accidents due to rock falls and poor equipment; eye injuries; asphyxiation;

- Health problems associated with treatment of artisanally-mined products including: repetitive strain injury from rock crushing; breathing in dust; exposure to mercury and the fumes from burning off mercury;
- Mining radioactive minerals; living near radioactive sites; prolonged exposure to radioactive minerals which may be stored in the home;
- Birth defects from maternal exposure to minerals and radioactivity;
- Poor hygiene and sanitation standards in the camps leading to gastro-intestinal disease, parasite burdens, etc.;
- Malnutrition due to poor standards of food especially at remote sites;
- Consumption of water and food contaminated with minerals from washing in local water sources, including bio-accumulation of minerals in fish and crops;
- Liver disease and other organ damage from prolonged and excessive use of alcohol and drugs.



Woman working with her baby in a gold mine.

In 2007, Police in Katanga arrested seven people, including law enforcement officers (police from the anti-fraud squad and a prosecutor), for pouring almost 19 tonnes of copper ore containing uranium samples with a radioactivity level 50 times over the safe legal standard into a river, threatening the drinking water for some of the 300,000 residents of the city of Lukasi⁷⁰.

Pact has found that less than 4% of artisanal miners interviewed in the Kowlezi area are aware of preventive measures against exposure to radioactive substances with high radioactivity⁷¹.

8.4 Environmental degradation

Artisanal mining has major impacts on the environment in the DRC. Trees are cut with abandon around artisanal mining sites in order to provide wood to build camps, to make supports in mining tunnels and shafts, as well as to produce charcoal for fires and cooking. Waste is poorly managed leading to spoil heaps being created around the site.

Artisanal mining operations are always located close to, and are supported by water bodies. Absolute dependence on the use of large amounts of water in mining operations dictates that mining operations are located as close to water sources as possible and in some cases at the water source⁷². Water sources are not protected and water that should be safeguarded for human consumption is contaminated by mineral washing. Pollutants are introduced to the water and broader environment, notably mercury around gold mines.

Finally, when the mine is depleted, the miners move to the next site with no effort to rehabilitate the site they have used. The miners will have exhausted not only the minerals but also the trees, water, crops, and other natural resources of the area. The link between environment and livelihoods has long been made, where a vicious circle of self-perpetuated degradation of their environment resulting from a dependence upon small scale mining can result in increased poverty and dependence upon natural resources⁷³.

Whilst artisanal mining is exempt from having to prepare and follow an environmental impact and management plan, according to Article 417 of the Mining Regulations, artisanal miners are obliged to pay a tax to be used for site rehabilitation. This is set at 10% of the cost of obtaining the artisanal mining card. In practice, this is neither known, nor collected, nor set aside, nor used.

Artisanal mining also takes place in protected areas in direct contravention of Article 3 of the Mining Regulations which prohibits the establishment of artisanal mining zones in protected sites. This has multiple negative impacts including direct destruction of the environment and cutting of trees as well as facilitating bushmeat hunting, including of endangered species. The access routes which are created for the miners to reach the mines enable habitations to be built and encourage destructive activities to occur far into the forests which might otherwise be inaccessible to the local population. The level of illegal mining activities in the forests is not at the same levels as were observed during the coltan boom when massive destruction of biodiversity was associated with artisanal mining, however it continues to be widespread and to increase as sites outside the protected areas are depleted.

8.5 Suggestions and comments from the field

During the consultation process, the social and environmental impacts of artisanal mining were acknowledged by all actors but the level of priority which was placed on them varied considerably. Whilst the miners and traders were aware of the problems and wanted something to be done, these fell lower on their list of urgent interventions than did economic, technical and market issues. Government at provincial and national level, as well as NGOs and civil society, along with donors, were far more likely to cite social and environmental issues as priorities for intervention. As noted previously, for social and environmental interventions to gain support, in the majority of situations they will need to be part of initiatives which primarily focus on economic and technical issues if players in the trade are to be motivated to implement and sustain improved social and environmental practices.

Given the vast scope of the social and environmental issues, it would be impossible for PROMINES to try to address these alone. It would also be an ineffective and controversial use of resources given that PROMINES has a largely economic and technical mandate and objectives. Therefore partnerships for change in these areas will be essential.



Environmental degradation caused by artisanal mining.

Chapter 9: Livelihoods and Poverty Alleviation



In this chapter:

- 9.1 Artisanal mining income
- 9.2 Artisanal mining - the cause of, or solution to, poverty?
- 9.3 Alternative livelihoods
- 9.4 Microfinance
- 9.5 Suggestions and comments from the field

9.1 Artisanal mining income

Artisanal mining can be an important component of poverty alleviation strategies in mineral-rich countries, providing a livelihood for many who may not have means of income generation otherwise. Despite traditional perceptions, many artisanal miners do not fall into the category of being ‘the poorest of the poor’ but, instead, may earn significantly more than their non-mining rural peers. However due to erratic spending habits, and lack of a savings culture, artisanal miners still end up being poor.

It is extremely difficult to get accurate information from artisanal miners about their daily income. First, artisanal miners are reticent to share information and often peg their income earnings higher in hopes that whoever the research is destined for is going to offer employment alternatives that exceed their current earnings. Second artisanal supply chains are subject to variances in formal and informal tax regulation as demonstrated in the chapter on taxation. Lastly, traders seek to maximise their profit margins and thus impose various buying prices according to international market variances and local business costs. It should also be noted that DRC’s vacillating and often extreme inflation contributes significantly to the pricing of raw minerals bought at the local mine level.

The following are examples of the income and expenditure reported by different artisanal miners during the consultation. They serve as cursory information on the types of income that some people gain in artisanal mining. They are neither comprehensive nor standard:

- In Kalehe, artisanal miners working in a reasonably productive mine would expect to produce around 5-6kg of cassiterite per miner per day. This has a sale price of around \$25. Of this, after the various taxes, etc, the artisanal miner might keep half;
- In Orientale, orpailleurs working in a reasonably productive mine would expect to produce around 1g of gold per day (at around 90% purity). This is a conservative average to balance out the days when they don’t produce anything. This would have a sale price somewhere around US\$28. Of this, they probably keep less than half;

- A teenager (under 18 years old) crushing cassiterite rock in South Kivu is paid 5,000 CFR (US\$5.80) to crush one 6-8kg sack of rock. He can usually crush one and a half sacks per day so earning a gross US\$8.70 per day. He pays a range of taxes on this, including 500 CFR (US\$0.60) for the rental of the hammer to crush the stones;
- In a gold mine in South Kivu, it was reported that each gram of gold is split: 30% for the Mwami, 35% for the PDG, and 35% for the team of miners. In this case, each miner is probably getting around 7% of the value of each gram (US\$2) but the team will produce several grams per day together;
- In Kolwezi, Katanga, projects to create alternative employment for artisanal miners need to offer around \$5 per day, on a contract with other benefits, to be attractive;
- In Twangiza, South Kivu, a minimum of \$4 per day needs to be offered to be attractive;
- Daily (casual) labourers working at a cassiterite depot in Goma filling 600kg drums with material for export are paid US\$5 per day. Over one hundred men queue up outside the gates every day hoping to be chosen for work;
- Gold miners at a site in Orientale reported that when a gold mine is at a good level of production, an average of four bottles of beer (\$5), cigarettes (\$1), telephone units (\$3), and a visit to a casual prostitute (\$6, more for a 'favourite regular') would be considered a daily minimum for personal expenses over and above paying for food, household costs, etc.

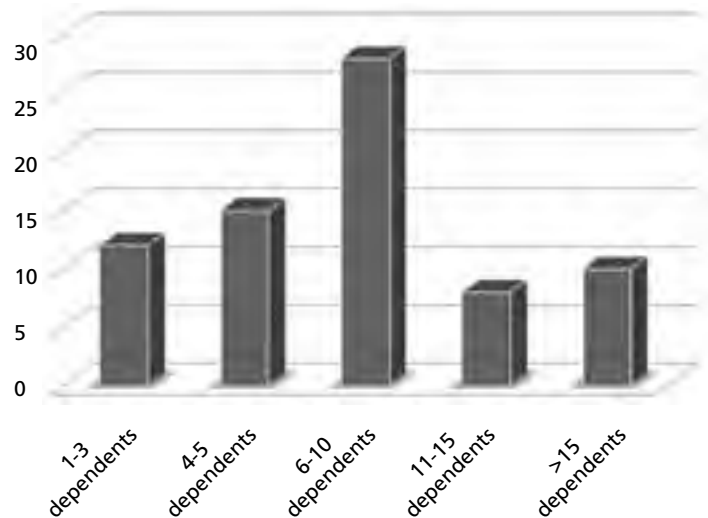
In an effort to try to get some data on levels of dependence on artisanal mining, we asked miners at all sites about the number of children they had and the number of 'dependents' (i.e. other family members who depended on them for financial support beyond their children. This was a random sample and not statistically significant. However we present the findings for interest sake. 73 participants advised us how many people depend directly on their income as show in Chart 4. The average number of direct dependents was 8.3.

9.2 Artisanal mining - the cause of, or solution to, poverty?

There is a growing school of thought which now argues that artisanal mining provides a better income for miners and supporting a larger community than does large-scale mining. According to the Institute of Security Studies' research on cassiterite mining in Maniema, artisanal mining generates higher output than industrial mining in the area did previously. The study also shows that artisanal mining was better for the majority of miners in Kalima, particularly during periods of high commodity prices. This is attributed to: the fact that artisanal mining employs more people than industrial mining did; that the artisanal miners in the area collect a far higher proportion of the final tin price for their cassiterite output than they did as employees of industrial mines; that artisanal miners benefit directly and immediately from rising global prices; and that diggers' employment conditions are less hierarchical and oppressive and, thanks to the proliferation of diggers' associations, far more democratic than they ever were under industrial mining. It is also worth noting that artisanal mining offers more livelihood opportunities for women, as evidenced by the emergence in Kalima of digger associations headed by women⁷⁴.

Recent research and analysis in the DRC by Mitchell & Garrett⁷⁵ (referencing Vlassenroot and Romkema⁷⁶) also suggests that *"to a certain extent, the informalization of the local extraction of natural resources could even be explained as a democratization of local mineral production. The advantages of mining activities are no longer limited to multinational companies or national elites, but also spread to the grassroots level and create an alternative*

Chart 4: Number of Dependents



source of income for many households. Interventions, which may reduce the value of minerals or further informalize and criminalize the trading chain, will affect these householders potentially in a severe manner.” In other words, artisanal mining provides a viable livelihood for miners who may not experience the same benefits under a more formalized structure.

However, artisanal mining does not provide a stable source of income for all participants. Data from a 2009 study in Tanzania shows that a regular income from gold mining may reduce vulnerability within mining households, but that production from diamond mining is too sporadic to provide a dependable income to buffer households against vulnerability to livelihood shocks. Still the overall results show that in the study areas, people working in mining or related services are less likely to be in poverty than people who are with other occupations in the same sites. The study shows that artisanal mining does have the potential to reduce poverty. However, the authors suggest that lack of security of tenure of mining sites reintroduces vulnerability and diminishes the potential for artisanal mining to reduce poverty⁷⁷.

Further, artisanal mining livelihoods can contribute to poverty alleviation, as defined by the Millennium Development Goals (MDGs). A 2009 study of artisanal mining in Cameroon and the Central African Republic (CAR) identified that mining incomes were spent on six basic needs, primarily food, with considerable proportions spent on education of children, purchases of clothes, construction of houses. The researchers considered that artisanal mining income in the study sites was already being used to increase the possibility of meeting the Millennium Development Goals of reducing poverty and meeting basic needs. Still, it is clear that a considerable proportion of ASM income is also spent on alcohol, drugs, and consumer goods, such as radios and televisions. However, the fact that appreciable proportions of miners were actually losing income implied that artisanal mining could also be treated as a risky business in alleviating poverty under prevailing socioeconomic and institutional arrangements⁷⁸.

The debts acquired by individual miners for tools and other goods can be prohibitively high, reinforcing a cycle of indebtedness and labour in the mines. Economies around mines often suffer price inflation which increases the cost of living, making it difficult for people to survive outside of the mineral economy.

Speaking strictly in economic terms, it is possible that artisanal mining may contribute to poverty alleviation under favourable regulatory arrangements that provide land tenure and mitigate risk to the miners. However

little studies and experience has demonstrated that once the real costs of doing business are properly accounted for, artisanal miners may gain a sufficient standard of living. Due to the informal nature in which the majority of the activity currently takes place, the real costs and value of artisanal mining is still very unclear and warrants further valuation before the link between artisanal mining and poverty alleviation can be properly understood and thus promoted. Certainly, if one looks solely at the conclusions around the scale of benefit from large-scale industrial mine activity for mineral-rich countries in Africa, the results are not too inspiring. In fact, By 2006, the poverty rate in mineral-poor [African countries] was actually lower than in mineral-rich [African] countries⁷⁹.



Artisanal gold miner in South Kivu.

To the extent that artisanal mining is destructive to the environment and contributes to unsustainable uses of natural resources, it contributes to poverty, rather than alleviating it. Poverty is multi-dimensional and the approaches to reduce it must be similarly multi-dimensional and inclusive of political, economic, social and environmental dimensions. Therefore, poverty alleviation requires opportunities by which the poor can do more for themselves in all these sectors, both in the present and in the future⁸⁰.

Despite artisanal mining's potential for poverty alleviation, it is risky when it is the sole source of income within a community. However, it is often the case that rural communities with mineral resources rely on mining as the sole potential economic engine. Given this overreliance on mining, there is a currently unfulfilled potential opportunity to invest income generated from mining into other productive livelihood activities, including mining up-scaling which may contribute towards poverty reduction. When mining income is invested back in to the community, it can become a driver of economic growth for other sectors, such as agriculture, livestock, or health. This requires capacity building of individuals to properly harness these opportunities.

Artisanal mining, like large-scale mining, is inherently unsustainable - no mine can last forever. Yet this is not well understood in the artisanal mining community. Many of the miners we spoke to understand that an individual mine may be exhausted but assume that they will find another. Many miners associate mystical powers with minerals, and roughly half of artisanal miners in Cameroon and CAR believe diamonds and gold are inexhaustible resources⁸².

As noted in the Chapter on artisanal mining operations, the methods used for finding a new mine are often ad hoc and inefficient. During this process they can run-up huge debt burdens with a typical investment in digging a new mine averaging between US\$1,000 and US\$2,000. When they are successful, newly discovered mineral deposits exert a magnetic pull attracting thousands of people into self-forming micro-economies. This can also draw people away from their traditional livelihoods, delivering short term economic benefits at the expense of their other, possibly more sustainable livelihood.

9.3 Alternative livelihoods

Because of the risks and problems associated with artisanal mining, development efforts frequently focus on creating opportunities and incentives for miners to diversify their skills, pursue other sources of income, and thus ultimately transition out of mining. Yet it can be very difficult to persuade artisanal miners to abandon an activity which, despite being extremely tough, delivers a daily and often quite substantial income. This is particularly challenging given the debt cycles described in the chapters above. However, given the percentages of artisanal miners who express interest in exiting the sector in pursuit of alternative, long-term economic opportunities, the promotion of alternative livelihoods deserves careful and considered analysis to ensure its viability.

Individual miners face disincentives to pursue other vocations. For one, diamond and gold mining provide the opportunity for miners to 'strike it rich,' and the 'casino mentality' associated with mining can be addictive. Second, many artisanal miners do speak of the collegial/familial feel to working in mines, and the comfort they derive from this in the country's current disparate community enclave structures. Third, in order to be effective, alternative livelihoods must not only provide a comparable income to that of mining; they must also provide long-term economic stability and an assurance for the future. Lastly, many miners are young men with limited education background and thus their re-integration into professional livelihoods is challenging.

Agricultural livelihoods are one alternative livelihood option heavily cited. It has traditionally dominated many provincial economies of the DRC. For example, until the 1990s, much of the Kivus' economy was dominated by a highly productive plantation economy consisting of coffee, pyrethrum, quinquina, other cash crops and cattle⁸³. Even today roughly 84% of the Orientale Province's population depends on agriculture as their prime livelihood source. However, its economic profitability is questionable when compared with artisanal mining where it is not unusual for miners to make five times as much as agriculturalists on average. A transition to agriculture for miners should further consider that miners typically generate income on a daily basis, whereas agriculturalists must wait several months at a time to receive payments for crops. Further, it is presumptuous to assume that all individuals are easily converted into agriculturalists or that they may have the interest to do so.

The collapse of large- and small-scale agriculture in the Kivus and Orientale has been associated with conflict, crop destruction, population displacement, recruitment to militias, etc, this was not so much the case in Katanga and yet the agricultural sector in that province is also in a parlous state. Where improvements are being seen in Katanga is often in association with the investment being made by industrial mining companies who: (a) see this as a livelihood alternative to move artisanal miners away from mineral exploitation on their concessions; (b) want to source food for their staff locally; and (c) are under a directive from the Provincial Governor to invest in a minimum of 500ha of maize per mine.

Projects which have been undertaken in Katanga to transform artisanal miners into farmers have had mixed success to date. Where success is seen it has frequently been associated with focusing on women who seem to be more open to embracing alternatives and where it is developed as a supplement to artisanal mining. It requires significant investment in, amongst other things, access to inputs, the provision of training, promotion of techniques such as seed and produce storage, and development of market linkages. Agriculture also suffers from something of an image problem where many young people do not aspire to the rural subsistence life but would prefer to work in the mines or in the towns, ideally as employees of mining companies.

Large scale mining can also contribute to alternative livelihoods. One example of this is Freeport McMoran's

operation in the Tenke Fungurume region of the DRC, which has the goal of generating four jobs in the local community for every one job at their mine. Large scale operations can support job creation through mine and site construction, material sourcing, and purchasing local food and supplies. However, once again, these projects assume that individuals are both inherently entrepreneurial in spirit and capable of operating small-businesses in a business environment that is generally acknowledged to be one of the most difficult business environments worldwide.

All this highlights that alternative livelihoods must be carefully thought through to ensure viability. Serious considerations must be given to local market demands and opportunities, the business operating environment, and individual capacity as key ingredients for success. A further ingredient is access to financing to pursue alternative options as discussed below.

9.4 Micro finance

A frequently cited obstacle to growth both within and outside the artisanal mining sector is the lack of access to finance and this was noted many times by participants in the study.

In the DRC, artisanal miners are heavily dependent on external sources of credit to finance their work. They need to access credit to buy or rent equipment, to pay for access to mines, and to survive while they are working in non-productive pits. The mines have many actors who are willing to extend this credit, usually for a high interest rate or for an arrangement which offers them first option to purchase materials or a reduced price.

This can be a very beneficial relationship as the miners need the cash, have no other options, and the creditors can help them out at short notice for things like medical expenses, etc. The creditor is very often a trader and they can perhaps get a better price for the minerals than the artisanal miner could if he went directly to a big *négociants*. However the relationship can also be exploitative if the interest rates are too high, the repayment terms are harsh, there is physical retribution for non-payment, debt is passed on to children, etc. It was difficult to get information on the levels of debt that the miners have however one *orpailleur* told us that he had a debt of 12 *kitcheles* (14.4g) due to a trader in the town. He had paid off 2 *kitcheles* (2.4g) and still had to return 10 (12g) at a rate of 1 *kitchele* (1.2g) per week.

The development of a mine is an expensive business. One *Chef de Chantier* has invested around \$5,000 in one year in a pit which is still non-productive and, during that time, he has to support the miners who are digging the pit plus he is accumulating interest due to the investor. Another *Chef de Chantier* had invested \$1,500 and, now that the mine was in production, he was repaying that with an interest rate of 10% per month. The request for PROMINES to make credit funds available for artisanal mine development was loud.

However there are many challenges with extending financial services to artisanal miners. Lessons from various artisanal mining finance programs demonstrate certain challenges to the extension of loan financing to artisanal miners by traditional financial institutions. Artisanal miners may be considered not credit-worthy for several reasons: migratory lifestyles, lack of land tenure, marginal legal status, and the social challenges associated with artisanal mining, along with poor (if any) financial and business planning skills. Mining areas may be remote, the mines may have a limited lifespan, and the sites often fall outside areas targeted by development programs. ASM is generally carried out with little access to geological assessment skills with which to identify or confirm the scale or value of the resource. Therefore, there are typically few guarantees of return on investment. Any



Gold miner operating a sluice, Orientale.

combination of these factors can contribute to a perceived or actual challenge in making repayments. Because credit-worthiness is an essential pre-requisite for any loan to be made or for other financial services to be accessed, artisanal miners rarely make it through the screening process. Coupled with this, artisanal miners are frequently insufficiently organized or prepared to qualify for financing on a scale attractive to traditional financial institutions⁸⁵.

In the absence of traditional credit sources, the next obvious option would be credit through microfinance institutions. However, as with traditional financial institutions, the pool of microfinance providers is often restricted in artisanal mining areas and the reality is that most miners requiring loans seek funds from creditors connected to the artisanal mining community. There was a clear recommendation in North Kivu that micro-finance opportunities should be provided at the *Centres de Negoce*.

A pilot project carried out in Ituri in 2009 indicates that focusing on micro-savings is an important first step towards extending micro-credit. Artisanal miners handle high value materials and often significant levels of cash will pass through their hands. However, the cost of living in artisanal mining areas is high and their lifestyle is profligate therefore they capture only a small amount of this value. As many artisanal miners have been restricted in their access to education, financial management skills and even simple literacy levels may be extremely low. Building on previous experience in women's empowerment, Pact (with funding from USAID and AngloGold Ashanti) carried out a project to provide literacy and financial skills training to groups of artisanal miners in Ituri, linked to the creation of savings groups. These groups created a communal savings box and learned how to use this capital to invest in improving their mining resources or to consider supplementary or alternative livelihoods.

9.5 Suggestions and comments from the field

Two of the main challenges encountered in receiving recommendations from stakeholders in relation to the negative externalities described in Chapter 8, and the subject of livelihoods, were: first, the expectation that PROMINES can be a magic bullet to address all of the issues at once, even those which are far beyond the remit of a technical support program for mining; and, second, the lack of appreciation that finding solutions to complex problems require sophisticated and integrated initiatives. For example, building schools will not solve the problem of child labour, and providing agricultural tools will not turn artisanal miners into farmers.

As a result, many of the recommendations made by participants in the consultation process are difficult to integrate into a viable action plan for PROMINES. There were, however, two clear messages which provide a platform for action:

Provide microfinance services

All actors agreed that improving financial management (through savings) and creating sources of finance which

can reduce the prohibitive and crippling debts which many in the sector accumulate will be a benefit. Access to finance can have the multiple benefits of: (a) capturing more of the value of the minerals that artisanal miners handle; (b) reducing their vulnerability to external debt; (c) providing capital to improve standards in artisanal mining; and (d) providing capital for those who wish to diversify their livelihoods or to quit the sector.

Improve mine planning and professionalism so that it is more credit-worthy

When we spoke with mine managers about the realities of external credit and investment, its conditionality and terms of repayment, etc, they appreciated that it retains some of the elements of the system of credit which already exists. It seems that ‘microcredit’ has become somewhat iconic as a concept but that the reality that this is a business service which expects some guarantees had been overlooked. However the artisanal mining community quickly recognised that and therefore recommended that technical services be provided to improve mine planning, efficiency, financial management, etc, in order that they might become more attractive to external creditors and investors.



Market stall at an artisanal mining camp.



In this chapter:

- 10.1 Prelude to the recommendations: the limitations to the potential for change and the risks inherent in the disruption of vested interests
- 10.2 Overall objective statement – framing the recommendations
- 10.3 Recommendations
- 10.4 Artisanal mining in PROMINES and the PAD
- 10.5 Indicative activities
- 10.6 Pilot Projects and Global Activities
- 10.7 Implementation
- 10.8 Budget

10.1 Prelude to the recommendations: the limitations to the potential for change and the risks inherent in the disruption of vested interests

In considering how to bring about change in the artisanal mining sector in the DRC, it is important to consider what would be the motivations and incentives for actors to participate in efforts to generate change. Based on the fundamental principle that artisanal mining is a business activity just like other forms of investment and work in the mining sector, when talking to the legitimate actors in the chain the message comes across loud and clear: in the simplest terms, the key motivation for everyone is to improve access to, and control of, resources:

- Artisanal miners want access to more minerals and to get a better price; they want finance for better equipment to increase their production; they want security of tenure to know that if they invest time and resources in a mine that they will not lose it;
- Traders want to have a guaranteed source of materials which purchase and re-sale at a more preferential price;
- Big traders and businesses want to see increased profits and improved access to markets;
- Government wants to see improved tax revenues contributing to national growth and to see an economically vibrant and healthy population legally generating and circulating wealth in a secure environment;
- Civil society wants to see poverty and its associated symptoms (ill health, gender discrimination, child labour, environmental degradation, etc) reduced in an environment where legal trade replaces illegal profiteering and corruption.

Whilst the government and civil society prioritize social and environmental issues, the primary driver for those directly involved in the trade is economic benefit. Therefore any initiative which hopes to achieve social benefits must find ways to do so by motivating the sector with financial incentives. For example, an initiative to increase productive sites available to artisanal miners will be popular and attractive and is potentially a good vehicle through which to introduce other activities which respond to the elements that donors, NGOs, government and policy makers want to see on the social and security front. To try to improve social or security conditions alone, without a financial incentive or motivation which will give some return on investment (whether that investment is financial or in terms of effort), is likely to be difficult and unsustainable.

However, the system is not limited to the legitimate actors described above and therein lays one of the greatest challenges to bringing about change.

Artisanal mining in the DRC is very big business. There is a huge amount of money involved in artisanal mining and trading in the region. It is very easy for traders, companies, authorities at all levels, government services, security agents, and others, including negative forces, to make considerable personal sums of money through control of aspects of the production and trade. Every attempt to change the system to improve transparency and to move towards regulation will cut some vested interests out. In some cases, these interests will be small and will have little power to fight their removal from the system or they will find new ways and guises in which to re-enter the system to continue to profit.

If, however, the actors are powerful and they stand to lose a great deal, they may choose forceful and aggressive ways in which to protect their interests. This may be manifest as efforts to spoil interventions and projects – recognising that it is cheap and easy to stimulate groups of artisanal miners and others to support a popular movement or to participate in demonstrations. It could also involve simply hiring security forces to protect a mine or a trade route. It could be manifest through bribes and incentives for corrupt practices which undermine the projects and interventions. At its most severe, reform could trigger the stimulation or escalation of localised or regional violence and conflict to create a screen under which artisanal mining and trade can continue unchecked. As pointed out by Mitchell and Garrett: *“Denying military groups access to mineral resources ... does not necessarily equate to an increase in security. Stakeholders should take care in suggesting interventions that may well increase insecurity by encouraging the various groups to increase taxation and extortion of the local population and seek other ways to diversify their income sources ... to more uncontrollable and undetectable minerals, such as gold and diamonds. Any change in the geography of the economics of the region will lead to a repositioning of all actors, including belligerents”*⁸⁶. Ultimately the big buyers, who need to control large quantities in order to gain sufficiently from the small profit margins on each trade, are the ones who stand to see their benefits eroded by every artisanal miner and trader who exits the system.

Equally, it is very important to note that not all actors in the artisanal mining and trading arena have free will in determining their actions and their participation in initiatives. The chain from production to market in the DRC is rarely a simple one of a digger producing something freely, selling it to a trader of his choice at an agreed price, and the trader selling it on by getting the best possible price on a free market. It can be far more complex than that.

All of these dynamics need to be considered carefully to try to identify and pre-empt unintended consequences. Even with the best of intentions, a project or initiative can create pressures and risks for its participants and the surrounding communities if it disrupts vested interests who then take measures to protect their assets.

There is a delicate balance which PROMINES must find and manage. The mining sector of the DRC is just one element of the national governance system, economy, and infrastructure (both the physical and the social infrastructure). The success of PROMINES' interventions will depend heavily on the enabling environment in which they will occur. Every effort must be made to link PROMINES' interventions to the broader process of improved governance, security, investment, growth and human rights, both nationally and in the region. However, whilst being conscious of this context and linking to efforts to improve it, PROMINES must nonetheless stay focussed on its specific objectives in the mining sector in order that realistic steps can be achieved in the time frame available. It is also essential to be realistic about what changes PROMINES can, and cannot, bring about therefore targets must be credible and achievable.

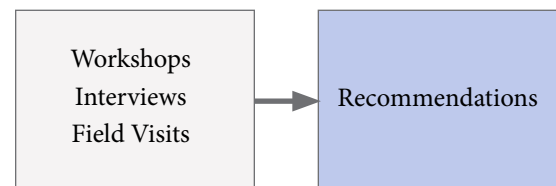
10.2 Overall objective statement – framing the recommendations

It is the objective of the artisanal mining component of PROMINES to improve the legal status, working practices, and economic return of artisanal mining in the DRC whilst establishing mechanisms to sustainably reduce its negative impacts on society, security and the environment.

The objective will be achieved through investment in the structures, capacities and resources to support legal, safe, and regulated artisanal mining, demonstrated through replicable pilot projects which respond to the economic and technical priorities of all stakeholders and address the issues of insecurity, gender, child labour and environmental degradation.

10.3 Recommendations

The recommendations came directly from the process of consultation in the field.

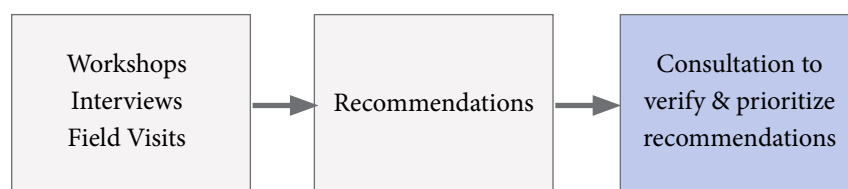


In each workshop, four thematic groups were established to consider specific aspects of artisanal mining and trade. These were: productivity and value addition in artisanal mining; the operating environment for artisanal miners and traders; the finances and economics of artisanal mining; and social and environmental issues.

The synthesis of all the recommendations made in the consultation process is as follows:

- Disseminate, implement and ensure observance of the mine law concerning artisanal mining;
- Provide technical training and support for artisanal miners;
- Strengthen the capacity of SAESSCAM to manage the sector ;
- Improve coordination between the state services involved in artisanal mining;
- Clarify and improve relations between the State Owned Enterprises, their Joint Venture partners and artisanal mining;
- Reduce corruption and strengthen artisanal mining tax returns;
- Improve access to markets through transparency and traceability systems;

- Reduce the incidence of child labour in artisanal mining;
- Strengthen the role and security of women in artisanal mining;
- Reduce the impact of environmental degradation by artisanal mining;
- Reduce the incidence of HIV/AIDS and STDs in the artisanal mining community;
- Encourage livelihood diversification in artisanal mining areas;
- Improve security in all artisanal mining areas;
- Identify and formalize artisanal mining zones and ensure access to them;
- Monitor the scale of artisanal mining in the DRC;
- Provide financial services and access to microcredit for artisanal miners;
- Encourage the creation of artisanal mining cooperatives and associations;
- Improve facilities for treatment of artisanally mined materials.



This list was then discussed with select participants in North Kivu, South Kivu and Katanga to determine if this was a comprehensive and valid list, and to prioritize the recommendations. The list was considered to be valid by all the stakeholders consulted in this round. The process of prioritization was more of a challenge. Depending on their specific role in the artisanal mining sector, each group of actors had different perspectives and hence different priorities. There were, however, four recommendations which all actors agreed were essential. These are:

- Disseminate, implement and ensure observance of the mine law in relation to artisanal mining;
- Strengthen the capacity of SAESSCAM ;
- Identify and formalize artisanal mining zones and ensure access to them;
- Provide financial services and access to microcredit for artisanal miners;
- Strengthen the role and security of women of women in artisanal mining.

The priorities identified by different groups, depending on their roles and perspectives, were (on average) in Table 10: 10.4 Artisanal mining in PROMINES and the PAD

The priorities also varied according to Provincial dynamic are shown in Table 11

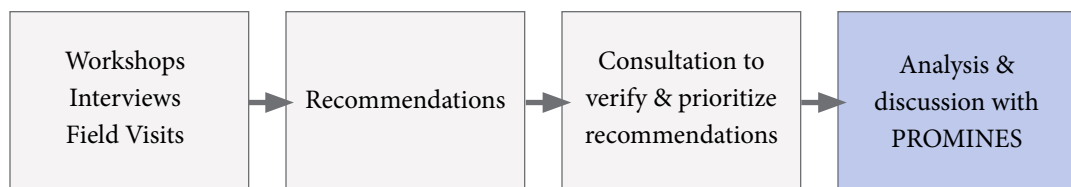
Table 10: Priorities of different stakeholder groups

Provincial Government	Agents of state departments	Traders	Artisanal miners	NGOs and civil society
<ol style="list-style-type: none"> 1. Improve security 2. Improve access to sites & treatment facilities 3. Encourage alternative livelihoods 	<ol style="list-style-type: none"> 1. Improve systems for taxation 2. Provide resources to enable them to do their jobs 	<ol style="list-style-type: none"> 1. Support certification to guarantee access to markets 2. Improve facilities for treatment of minerals 	<ol style="list-style-type: none"> 1. Improve security 2. Expand co-operatives 3. Provide technical assistance & equipment 	<ol style="list-style-type: none"> 1. Improve security 2. Encourage alternative livelihoods 3. Strengthen the role of women 4. Reduce child labour 5. Improve environmental protection

Table 11: Priorities by Province

Oriental Province	North Kivu Province	South Kivu Province	Katanga Province
<ol style="list-style-type: none"> 1. Improve access to markets by increasing the number of comptoirs 2. Improve relations between artisanal miners, OKIMO and companies 	<ol style="list-style-type: none"> 1. Improve security & demilitarize the mining areas 2. Support certification for access to markets 	<ol style="list-style-type: none"> 1. Improve security & demilitarize the mining areas 2. Encourage alternative livelihoods 	<ol style="list-style-type: none"> 1. Formalize artisanal mining zones and improve their management 2. Improve relations between artisanal miners, Gecamines and companies 3. Encourage alternative livelihoods

10.4 Artisanal mining in PROMINES and the PAD



Artisanal mining faces many of the same challenges and needs as those of the industrial mining sector. Thus the categories identified in the components of PROMINES and the World Bank Project Appraisal Document (PAD) (access to resources; management capacity; taxation; revenues; social and environmental impacts) are equally relevant to artisanal mining and, therefore, the recommendations that have been made are presented in alignment with the PROMINES Components, rather than being relegated to a single item under Component E, Sustainable Development. It is vitally important that the artisanal mining sector is integrated across the project to benefit from the investment and improvements that will come about at every level.

Component A. Access to resources

PAD: The main objective of this component is to address fundamental impediments to access resources and create an

enabling environment for mining development operations in the DRC. The project will: (1) support activities intending to improve the policy, legal, and regulatory framework; (2) develop the geo-data infrastructure; and (3) develop human resources for the mining sector.

In examining the mine law as it pertains to artisanal mining and comparing this to the situation on the ground, it is immediately clear that there are inconsistencies and contradictions, as well as flagrant violations, throughout the sector. The consultation process for the PROMINES Artisanal Mining study also undertook a participative analysis with the contributing stakeholders to consider the appropriateness of the current mine law for regulating the sector. There was a clear recommendation that a review is needed to harmonize policy and practice in a reasonable and constructive way. There was also a clear concern for the lack of knowledge of the law and the lack of resources for its implementation.

Access to resources, from a legal and practical standpoint, was raised as a key issue and challenge in the artisanal mining sector by stakeholders in all the provincial consultations. The formalization of legal artisanal mining zones and access routes by which to access them, were consistently identified as essential activities. The formalization of such zones depends on the identification of geologically viable sites where manual mineral extraction is an appropriate exploitation technique. Whilst the actual formalization of artisanal mining zones may fall under component e: sustainable development, the identification of potential sites is closely aligned to component a: access to resources.

Skills development and training are urgently needed in the artisanal mining sector just as in large-scale mining. Poor practices and inefficient techniques are leading to dangerous work conditions and poor optimization of resources.

Based on the above, the following set of stakeholder recommendations should be considered as elements of (or at least aligned to) Component A: Access to Resources:

- Review, elaboration, dissemination, implementation and observance of the mine law in relation to artisanal mining
- Formalization of viable, legal and appropriate artisanal mining zones; (*see Component E: Sustainable Development*)
- Technical training and support to actors in the artisanal mining production, treatment and trading chain

Component B. Sector Management Capacity Building

PAD: this component will: (1) build capacities in key oversight institutions of the sector; and (2) strengthen negotiation capacities and portfolio management.

Management of the artisanal mining sector depends heavily on the competent presence of SAESSCAM in the artisanal mining areas. Definition of SAESSCAM's role, building its technical capacity, and the establishment of management and financial policies and systems, with the resources to implement these, are essential. Yet SAESSCAM is not the only government agency with responsibilities for artisanal mining and a clear need was

expressed for a mechanism to improve communication and coordination between the various departments in order to reduce delays and confusion.

The State Owned Enterprises (SOEs) are amongst the major managers and purchasers of artisanal mining activities and products in the DRC. Their use of artisanal miners creates conflicts with their joint venture partners and the levels of tax levied on artisanal miners and traders operating on their sites are extremely high (typically up to 30%). Thus, whilst the major focus on SOEs will occur in Phase 2 of the project, some preliminary work on the ASM issue is needed in Phase 1.

In light of this, the following set of stakeholder recommendations should be considered as elements of (or at least aligned to) Component B: on Sector Management Capacity Building:

- Strengthen the capacity of SAESSCAM
- Improve coordination between services involved in artisanal mining
- Standardize relations between the SOEs, their JV partners and artisanal miners

Component C. Tax Collection and Transparency

PAD: The project will complement the efforts presently carried out under other WB and donors projects and support activities intended to: (1) strengthen capacities in tax collection; (2) support mechanisms to promote and monitor transparency in the sector.

High levels of illegal, informal and capricious taxation pervade the artisanal mining sector in the DRC. This is directly linked to the presence of 'non-eligible' and illegal actors in the artisanal mining areas and the predatory behaviour of certain groups which contributes to insecurity around artisanal mines. Reduction, standardization, and dissemination of the legal tax regime have been identified as an essential activity in the ASM consultations. Whilst the 'guichet unique' system has been identified as an activity for Phase 2, these are already in operation around certain artisanal mining areas therefore assessment of their operations would be a useful learning opportunity in Phase 1. A further key activity identified by stakeholders for Component C is to develop a mechanism for inter-provincial consultation and harmonization of ASM taxes.

The top priority identified in North and South Kivu in particular was support for the development and implementation of transparency and traceability systems which can assure access to market for artisanally mined minerals.

With reference to these key economic issues, the following set of stakeholder recommendations should be considered as elements of (or at least aligned to) Component C: Tax Collection and Transparency:

- Reduce corruption and strengthen legal taxation in the artisanal mining sector
- Improve access to markets through transparency and traceability systems

Component D. Allocation of mining revenues

No specific artisanal mining activities are identified under this component for Phase 1.

Component E. Sustainable development of mining

PAD: this component will support activities intended to improve: (1) the management of social and environmental aspects of mining; (2) the integration of mining into local and regional development; and (3) the management of artisanal and small-scale mining.

Artisanal mining, given its enormous geographic range and economic importance, has significant social and environmental implications and impacts which were clearly presented in the consultation process. Allied to this, an overarching requirement in the Kivus was identified as the de-militarization of the mining zones in order to enable legal and safe mining to take place. Whilst it is recognized that this is neither the mandate nor the responsibility of PROMINES, there are ways in which PROMINES can contribute to this objective.

To address the negative environmental and social impacts of artisanal mining, the following set of stakeholder recommendations should be considered as elements of (or at least aligned to) Component E: Sustainable Development:

- Reduce the incidence of child labour in artisanal mining
- Strengthen the role of women in artisanal mining
- Reduce the impact of environmental degradation by artisanal mining
- Reduce the incidence of HIV/AIDS and STDs in the artisanal mining community
- Support livelihood diversification in artisanal mining areas
- Improve security in artisanal mining areas

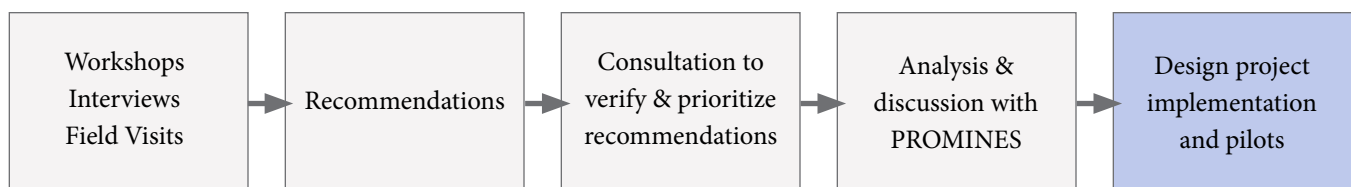
The main technical aspects to improve management of the artisanal mining sector are identified under Component E. The recommendations made in the consultation process include:

- Identification and formalization of legal artisanal mining zones (with reference to the geological data available through Component A: Access to Resources)
- Monitoring the scale of artisanal mining in the DRC
- Financial services and access to microcredit
- Creation of mining cooperatives and/or associations
- Improving facilities and techniques for treatment of artisanally mined materials

Table 12: ASM in the PROMINES Components

PROMINES Component	Artisanal Mining Recommendations
Component A: Access to Resources	Dissemination, implementation and observance of the mine law
	Provide technical training and support for artisanal mining
Component B: Sector Management Capacity Building	Strengthen the capacity of SAESSCAM
	Improve coordination between services involved in artisanal mining
	Clarify and improve relations between the SOEs, their JVs and artisanal mining
Component C: Tax Collection and Transparency	Reduce corruption and strengthen tax returns from artisanal mining
	Improve access to markets through transparency and traceability
Component E: Sustainable development - environmental and social management of mining	Reduce the incidence of child labour in artisanal mining
	Strengthen the role and security of women in artisanal mining
	Reduce the impact of environmental degradation by artisanal mining
	Reduce the incidence of HIV/AIDS and STDs in the artisanal mining community
	Livelihood diversification in artisanal mining areas
	Improve security in all artisanal mining areas
Component E: Sustainable development - management of artisanal mining	Identify and formalize artisanal mining zones
	Monitor the scale of artisanal mining in the DRC
	Provide financial services and access to microcredit;
	Encourage the creation of mining cooperatives and associations
	Improve facilities for treatment of artisanal mining materials

10.5 Indicative Activities



The recommendations have been analyzed to produce a set of indicative activities which are given in the following table (Table 13: Indicative Activities).

Table 13: Indicative Activities

PAD Component	Recommendation	Indicative Activities
Component A. Access to Resources	Ensure dissemination, implementation and observance of the mine law;	<ul style="list-style-type: none"> • Review the ASM Mine Law in relation to land and forest law to identify areas of conflict and to recommend how these can be resolved; • With reference to the review of SAESSCAM's mandate and the pilot project sites, identify major areas of conflict within the law and ensure they are being addressed in the capacity building of SAESSCAM and the improved coordination of state actors; • Establish a monitoring system to measure progress and identify the major areas of abuse of the Mine Law; • Evaluate and adapt existing materials and approaches for the dissemination of the Mine Law in French, Lingala, Swahili and other languages (using mixed media including written materials, images, theatre); • Formalize a network of partners in all sectors and provide support (materials, training, small grants) to them to disseminate the Mine Law as part of their other activities; • Building on feedback from partners and others, review the Mine Law as it pertains to ASM and provide appropriate input into the legal revision process; • Provide revised materials and updated support to the dissemination network; • Strengthen the services responsible for enforcement of the Mine Law and provide assistance to civil society organizations to ensure that abuses of the Mine Law are pursued through the legal system.
	Provide technical training and support for artisanal miners to improve techniques and levels of production;	<ul style="list-style-type: none"> • Identify the correct actors and beneficiaries for training at each of the pilot project sites; • Engage international CASM partners to provide information and training on improved and appropriate techniques; • Train the trainers (SAESSCAM, artisanal miners themselves, partners); • Develop, trial and refine training programs for different minerals and sites; • Provide financial and material resources for the implementation of improved techniques at the pilot sites; • Assess the results of the pilot projects, revise and expand; • Hold regional training and information exchange events focused on practical issues and techniques; • Provide equipment and training to the mining services including laboratories for mineral analysis.
Component B. Sector Management Capacity Building	Strengthen the capacity of SAESSCAM	<ul style="list-style-type: none"> • Carry out a review of SAESSCAM's mandate and operational units (with reference to roles in technical support and tax collection) and an audit of SAESSCAM's capacity to fulfill this mandate; • Develop and implement a national plan for all aspects of financial, technical and personnel management; • Design and implement a recruitment, training, operations and performance-based monitoring process; • Identify certain SAESSCAM office(s) as pilot sites to undergo a complete organizational, technical, and financial restructuring to act as model(s); • Develop a business plan for the financial operations of SAESSCAM at each site; • Trial a system for reduced cost <i>Carte de Creuseur</i> to be issued by SAESSCAM; • Develop an implement policies on integrity, corruption and whistle-blowing at all sites; • Analyse and compare the site results with the national mandate and capacity; • Assess the results of SAESSCAM models; • Based on the lessons from the pilot sites, expand the restructuring process to all SAESSCAM offices

Continued.

<p>Component B. Continued.</p>	<p>Improve coordination between services involved in ASM</p>	<ul style="list-style-type: none"> • In association with the SAESSCAM trials, review the potential for a site distribution mechanism for a reduced-cost <i>Carte de Creuseur</i> to incentivize its uptake; • Review the process and reduce the delay experienced by all actors (<i>comptoirs</i>, negociants, artisanal miners) in the process of getting legal status, licenses, Cartes; • Streamline the coordination of the ASM sector within national & provincial government
<p>Clarify and improve relations between the SOEs, artisanal miners and their JV partners</p>	<ul style="list-style-type: none"> • Develop standardized regulations to govern the relations between the SOEs, artisanal miners and their JV partners; • Review and regulate the levels of taxation levied on artisanal miners by the SOEs; • Review and regulate the purchasing systems used by the SOEs in relation to pricing, obligatory sales, access fees, debt, etc, which put ASM at a disadvantage; • Establish an effective financial reporting system in one SOE (as a pilot) to record the value of ASM taxes/commerce; • Assess the results of the pilot financial model to expand to other SOEs in Phase 2 	
<p>Component C. Tax Collection and Transparency</p>	<p>Reduce corruption and improve tax transparency in the ASM sector</p>	<ul style="list-style-type: none"> • In the project sites, standardize taxes and disseminate the legal tax regime including details of legitimate actors; • Analyze the current '<i>guichet unique</i>' systems in operation, assess and standardize across the pilot sites; • Formalize a network of partners in all sectors around the pilot project sites and provide support (materials, training and small grants) to them to disseminate the ASM tax regime and to provide recourse for ASM victims of tax abuse as part of their other activities; • Develop and implement a system of internal traceability for ASM taxes with a plan for retrocession to ASM areas (linked to the capacity building plan for SAESSCAM and the ASM coordination mechanism for relevant state actors) which includes assurance of payment of the ASM state agents to reduce their incentive/need for corruption; • Develop and implement a system (using the pilot project sites to establish precedents) whereby state agents are required to disclose their financial interests in ASM; • Engage with the services responsible for enforcement of the Tax Law and provide assistance to civil society organizations to ensure that abuses of the ASM tax regime are pursued through the legal system. • Through the government service coordination mechanism, ensure alignment and coherence between national and provincial policies on mineral taxation to avoid counterproductive or contradictory actions
<p>Improve access to markets through traceability and certification;</p>	<ul style="list-style-type: none"> • Act as a coordination mechanism for the traceability and certification initiatives being proposed for eastern DRC to ensure that they are harmonized and that there is no confusion in terms of their objectives and activities; determine how these can merge over time based on assessments of their effectiveness; • Provide direct support to the traceability and certification initiatives, focusing on capacity building for the local actors engaged in the process; • Facilitate multi-stakeholder risk analysis and stakeholder mapping as a management tool; • Support local actors in formulating and disseminating a measured and realistic response to international lobbies against DRC minerals; • Building on the experience gained in the coordination process, identify actors such as LSM operations and international buyers who are willing to engage with well-managed, legal ASM operations to buy their product (with or without certification). Provide technical and financial assistance to establish such initiatives; 	

Continued.

<p>Component C. <i>Continued.</i></p>	<ul style="list-style-type: none"> • Harmonize PROMINES pilot sites with the initiatives providing the technical and social elements which are missing from the trade regularization plans; • Provide technical and financial assistance to establish independent valuation mechanisms which can give accurate market information to ASM producers; • Support the development and implementation of communications mechanisms related to access to market pricing for ASM producers. 	<ul style="list-style-type: none"> • Fund (or co-fund) at least one major project to address child labour in one key artisanal mining area. The project should take a multi-sectoral and stakeholder approach, working through local partners, to address the specific drivers of child labour in that area. The project should build the capacity of key ASM actors including SAESSCAM to reduce child labour in the broader ASM community; • Disseminate information on child labour legislation at suitable pilot sites and provide appropriate small-scale support to local actors engaged in trying to prevent this.
<p>Component E. Sustainable development – Environmental and social management of mining</p>	<p>Reduce the incidence of child labour in ASM</p>	<p>Strengthen the role and security of women in ASM</p> <ul style="list-style-type: none"> • Fund (or co-fund) at least one major project to empower women working in artisanal mining to strengthen their roles, their economic position, their choices, and/or their security. The project should build gender awareness in key ASM actors including SAESSCAM • Develop and introduce a gender awareness plan into SAESSCAM; • Support the creation of local networks of women working in artisanal mining to enable exchange and solidarity to address issues of gender discrimination and market opportunity; • Facilitate connections with organizations and networks of women in ASM in other countries through CASM; • Disseminate information on the laws relating to sexual and gender-based violence and support local partners to implement appropriate programs.
	<p>Reduce the impact of environmental degradation by ASM</p>	<ul style="list-style-type: none"> • Engage with donors working in the HIV/AIDS sector to focus on the ASM community; • Commit to providing appropriate support (technical input, training in working with ASM communities, etc) to partners willing to include an ASM focus in their activities; • Fund (or co-fund) a project to combat HIV/AIDS in a key ASM area which is at high risk of transmission of infection (such as Walikale) or along a key trade route (such as Kolwezi to Kasumbalesa); • Develop and disseminate the learnings and materials from this project widely to encourage uptake by other partners.
	<p>Livelihood diversification in ASM areas</p>	<ul style="list-style-type: none"> • Engage with donors (including LSM companies) to encourage the development of livelihood alternatives for a realistic portion of artisanal miners, including women; • Commit to providing appropriate support (technical input, training in working with ASM communities, etc) to partners willing to include an ASM focus in their activities

Continued.

<p><i>Component E. Continued.</i></p>	<p>Improve security in all artisanal mining areas;</p>	<ul style="list-style-type: none"> • In the pilot project areas, identify all security actors (public and private), their official and unofficial roles, their performance and the conflicts that arise as a result of competing mandates and interests; • Building on existing models and mechanisms, support the creation of <i>Cadre de Concertation</i> of local security committees in key ASM areas. Provide training on communications and conflict resolution with small grants for establishing operations; • Engage with the initiatives in E.DRC that seek to stabilize peace in the region with the specific objective of demilitarization of artisanal mining areas; • Design and implement a process to remove all unauthorized security actors from artisanal mining areas using legal mechanisms and punitive measures; • Support building awareness of the implications of sexual and gender based violence (SGBV) and assist social groups in ASM areas to start local campaigns against SGBV.
<p>Component E. Sustainable Development – Management of ASM</p>	<p>Identify and formalize artisanal mining zones</p>	<ul style="list-style-type: none"> • Review and improve operations and working/living conditions at the Kawama Artisanal Zone in Kolwezi as a model; • Develop a legal template and regulations for ASM Zone creation and management which includes definition of the roles and responsibilities of other actors involved in activities such as <i>decouverte</i>; • Identify other potential sites with suitable resources (in terms of geology, access, volume, value) and provide support to the local authorities and ASM community to develop business and management plans, ensuring that local communities are consulted; • Formalize 3 new artisanal mining zones, engaging the provincial administrations (S.Kivu, N.Kivu, Orientale) to develop at least one site each; • Engage willing LSM actors to consider how appropriate parts of their concessions could be legally granted to SSM/ASM actors. Design and roll-out pilot projects.
	<p>Monitor the scale of ASM in the DRC</p>	<ul style="list-style-type: none"> • Establish a centralized database to collect information from SAESSCAM, CAMI, NGOs and others regarding ASM numbers and distribution, using existing info and a simple data recording system; • Establish a publicly available mapping resource which shows artisanal mining sites, the deployment of armed groups, the human rights situation at mining sites, changes in mining activity at sites and the buyers who frequent them. This should be linked to: information on <i>négociants</i> and <i>comptoirs</i> who buy at the site; the presence/misbehaviour/profitting of armed groups; production centres to the locations of markets and transport routes; and other data relevant to due diligence, traceability or certification⁸⁷. • Formalize a network of partners in all sectors and provide support (materials, training and small grants) to them to monitor ASM numbers and movements as part of their other activities; • Ensure that all actors engaged in artisanal mining initiatives in the DRC are contributing information to the database; • Establish indicators to be used by all project and initiatives; • Publish regular reports on the situation

Continued.

<p><i>Component E. Continued.</i></p>	<p>Provide financial services and access to microcredit for artisanal miners and traders;</p>	<ul style="list-style-type: none"> • Carry out a comprehensive study on indebtedness in artisanal mining in the DRC to establish a baseline and realistic parameters for interventions; • Assist artisanal miners to create individual and collective savings as an alternative, and a response, to debt at pilot sites; • Establish pilot projects to develop business and technical skills as essential precursors to accessing financial services; • Engage microfinance partners who are willing to extend financial services to suitable ASM areas and actors on a pilot basis following business and technical training; • Facilitate peer-learning with artisanal mining communities in other countries where SACCOS (Savings and Credit Cooperatives) operate effectively; • Assess the results of the pilot projects and develop a larger mechanism (savings, financial and technical training and finance package) to be extended to other areas
<p>Encourage the creation of mining cooperatives</p>	<p>Encourage the creation of mining cooperatives</p>	<ul style="list-style-type: none"> • Review the definition and purpose of cooperatives building on current structures, international models and best practice as defined by organizations such as the ILO; • Provide technical and financial support to groups of artisanal miners who wish to form cooperatives aligned to best practice as pilot projects; • Through the government service coordination mechanism, simplify the process of getting legal status for ASM cooperatives; • Assist co-operatives to move towards formalization as small-scale mining companies with improved resource rights and capacity for value-addition.
<p>Improve facilities for treatment of ASM materials</p>	<p>Improve facilities for treatment of ASM materials</p>	<ul style="list-style-type: none"> • Support initiatives to increase productivity through appropriate, improved recovery techniques at ASM sites and at depots within the DRC borders; • Support the development of business plans to assist in accessing finance for new or rehabilitated treatment facilities; • As part of SAESSCAM's capacity building, provide technical training such that engineers can provide accurate advice on the development of facilities; • At appropriate pilot project sites, provide technical and financial support for the establishment of improved treatment facilities for trained ASM groups to install appropriate treatment facilities based on their business plan.

10.6 Pilot Projects and Global Activities

Pilot Projects

In order to implement the suite of activities recommended, five Pilot Projects are proposed. The selection of pilot projects has used the following criteria:

- To achieve a geographic spread across the four provinces involved in the consultation process;
- To present a mix of projects which share certain common themes and activities but which each address a key priority issue in the ASM arena;
- To provide a portfolio which includes a suite of projects addressing legal, technical, governance, economic, social and environmental issues;
- To work in areas where there are known activities already in place or planned on which PROMINES can build or interested partners with whom to work;
- To develop models which can be replicated elsewhere using the lessons, guides, etc, drawn from the projects.

As each province presents individual priorities, needs and opportunities, the focal areas of the five different projects are tailored to provide a local response with national relevance. The specific issues that each project will focus on are:

- Multiprovincial: formalization of legal artisanal mining zones (starting in Katanga with expansion to the other three provinces);
- North Kivu & South Kivu: traceability, certification, security;
- Orientale: clarifying and regulating relations between the SOEs, their JV partners, and ASM (with extension to Katanga in Phase 2)
- Katanga: the elimination of child labour from artisanal mining (with relevant elements extended to other provincial pilot sites);
- South Kivu and Orientale: developing and disseminating appropriate technology in ASM gold recovery to reduce the use of mercury;

Global Activities

By sharing certain sets of activities, the projects will use standard tools and approaches (with some contextual modifications) and they will report against common indicators. This will be a main contributor to the learning process in the project. The Global Activities will all have national level activities associated with them, alongside the implementation at the Pilot Project level. The five Global Activities that all projects will share include:

- Dissemination and implementation of the mine law;
- Strengthening the capacity of SAESSCAM to manage the artisanal mining sector;

- Monitoring ASM in the DRC;
- Strengthening the role of women as mineral traders and business operators in and around artisanal mining sites, along with improving their security status;
- Provision of financial services (micro savings) building up to access to credit.

All other activity areas recommended in the consultation process are represented within at least one of the proposed projects as shown below in Table 14. Thereafter, each of the Pilot Projects and Global Activities are described in more detail.

Pilot Project 1	The formalization of legal artisanal mining zones
Pilot site	Kawama, Katanga as start-up site with expansion to S.Kivu, N.Kivu, Orientale <i>The justification for starting with Kawama is that it is the most advanced artisanal mining zone in the country at present. It has legal status and a constituency of actors with whom PROMINES can engage. In determining the pilot sites in other provinces, an analysis of the sites already designated in the Arrêtés will be required as well as connecting with sites where investment is being made through other initiatives, e.g. Bisie in North Kivu.</i>
Objectives	<ul style="list-style-type: none"> • To establish mechanisms whereby ASM can have legal access to appropriate mineral resources; • To model mine activity in which ASM delivers improved economic benefits to the artisanal miners themselves; • To define and strengthen the existing legal mechanism which permits responsible ASM to occur on designated sites in a way that respects health and safety, decent living conditions, the environment, and community rights; • To ensure that the national geo-data resource includes allocation of appropriate mineral resources (which are not suitable for LSM) to ASM.
Activities	As per the Pilot Project & Activity Matrix
Results	<ul style="list-style-type: none"> • Four artisanal mining zones functioning as models, meeting all legal requirements, demonstrating good practice in terms of health and safety and living conditions, one in each of Katanga, S.Kivu, N.Kivu and Orientale; • Guidelines on artisanal mining zone management produced and disseminated including business planning guidelines; • SAESSCAM and other actors empowered (technically and legally) to fulfill their designated roles in the creation and management of ASM Zones; • The role of SOEs on ASM Zones clarified and disseminated; • A legal mechanism agreed and trialed to permit ceding parts of LSM concessions for ASM purposes; • Information on the legal taxes and payments associated with ASM Zones clarified and disseminated; • Guidelines on 'urban planning' for mine camp management in respect to water, sanitation, mine waste, deforestation and other environmental/community risks developed and disseminated; • Information on HIV/AIDS and other STDs disseminated in ASM Zones; • Savings and financial management programs established in ASM Zones as a precursor to introduction to microfinance services; • Mining associations defined and established in all ASM Zones; • Where appropriate, mineral treatment facilities established in ASM Zones
Implementing partners	<i>Ministre des Mines; Division des Mines; SAESSCAM; CEEC; CTCPM; CAMI; Provincial authorities; Police; ASM Cooperatives; ASM Associations; Small-scale mining enterprises; EU; UNDP; Other UN agencies; ILO; International/Local NGOs; Traditional authorities; others</i>
Potential funding partners	Improve access to markets through transparency and traceability

Pilot Project 2	Traceability, certification, and security
Pilot site	<p>North Kivu (Goma, Bisie, other ASM sites) and South Kivu (Bukavu and surrounding ASM sites)</p> <p><i>The selection of sites will be strongly related to the thinking and decision-making of the various initiatives which are starting up in eastern DRC. This is still unclear, however Bisie is certainly a key target for North Kivu given its importance and the international attention focused on this site.</i></p>
Objectives	<ul style="list-style-type: none"> • To ensure legal access to international markets for ASM minerals from the DRC; • To improve traceability of minerals to ensure they are not funding conflicts; • To contribute to efforts to de-militarize ASM areas to improve security in the sector; • To ensure that state actors have the capacity and resources to participate fully and sustainably in these initiatives; • To contribute to the establishment of realistic targets around social and environmental conditionality for certification systems with measurable plans for their achievement.
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> • At least one tested and evaluated certification system for E.DRC minerals operational; • System of Centres de Negoce tested and guidelines for their operation developed and disseminated; • Systems for dissemination of market prices and improve product valuation developed and installed; • All government actors involved in the process are trained and resourced to fulfill their roles with an appropriate monitoring system in place to ensure progress; • Cadres de Concertation established in key ASM areas for community engagement, monitoring, and conflict resolution; • Process for removal of unauthorized security actors from ASM areas development and implemented in an agreed number of sites;
Implementing partners	<p>Ministre des Mines; Ministre de l'Interieur; Ministre de Defence; Division des Mines; SAESSCAM; CEEC; Provincial authorities; Police; FARDC; OFIDA; DGRAD; DGI; MONUC; IOM; ITRI; ICGLR; BGR; GTZ; PAC; ASM Cooperatives; ASM Associations; <i>Comptoirs</i>; Small-scale mining enterprises; Transport enterprises; Pact; Local NGOs; others</p>
Potential funding partners	<p>MONUC/OIM; ITRI; BGR; ICGLR; PAC; GTZ; <i>Comptoirs</i>; international initiatives; end-user companies and foundations; bilateral donors; others</p>
Notes	<p>See the accompanying matrix of traceability initiatives and actors describing how PROMINES can interface, support and complement these actions</p>

Pilot Project 3	Clarifying and regulating relations between the SOEs, their JV partners, and ASM
Pilot site	Oriental on OKIMO concessions 38, 39 and 40 <i>The OKIMO concessions are recommended for several reasons: first, the JV partners on the sites are all willing to participate in activities to improve relations; second, the flow of gold from these sites is known to enter unofficial circuits and efforts to improve transparency will make an important contribution to state revenues; and, third, it is an area where SAESSCAM are in the early stages of installation therefore this will be a good learning opportunity.</i>
Objectives	<ul style="list-style-type: none"> • To clarify and disseminate the legal status of SOE use of artisanal miners on mining titles which have been granted to JV partners; • To facilitate dialogue between all partners for conflict mitigation and resolution; • To support the creation of associations which represent artisanal miners to complement those which already represent traders and OKIMO sub-contractors; • To regulate the purchasing systems used by the SOEs in relation to pricing, obligatory sales, access fees, debt and other mechanisms which put artisanal miners at a disadvantage; • To clarify and disseminate the legal taxes that should be paid to the State on SOE sites; to remove illegal payment structures and actors from the concessions; to maximize legitimate revenues to the state; • To establish an effective financial reporting system to record the value of ASM taxes and commerce to the state; • To assess the results of this intervention with a view to its expansion to Gecamines and MIBA in Phase 2
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> • Guidelines developed and disseminated which clarify the legal status of all actors on the concessions, their roles, their rights and their responsibilities; • A regular forum established for conflict resolution purposes between all actors; • The creation of at least one new association on each concession which has the capacity to effectively represent artisanal miners; • Information on legal taxes developed and disseminated (through appropriate media) with a recourse mechanism to the conflict resolution forum for tax abuses; • A financial reporting mechanism established, operational, assessed, and replicable which will record the value of ASM taxes to the state
Implementing partners	OKIMO; <i>Ministre des Mines; Ministre de Finance; Division des Mines; SAESSCAM; CEEC; Provincial authorities; DGRAD; OFIDA; DGI; Police; ASM Cooperatives; ASM Associations; ASM Comptoirs; Sous Traitants; AngloGold Ashanti; Mwana Africa; Randgold Resources; COMET; International/Local NGOs; Traditional authorities; others</i>
Potential funding partners	AngloGold Ashanti; Mwana Africa; Randgold Resources; COMET; other multi- or bilateral donor agencies; others

Pilot Project 4	Elimination of child labour from artisanal mining
Pilot site	<p>Kolwezi, Katanga</p> <p><i>Whilst the issue of child labour will be a major concern on all sites, it is an extremely complex problem and sustainable solutions will not come from short-term interventions. A holistic approach to understanding and addressing the drivers, whilst also building infrastructure and capacity for change, will be required. Therefore it is proposed that PROMINES should focus on one area where there is true potential for change to be seen within the life of this project. Kolwezi has very specific drivers, dynamics and potential which mean that setting an ambitious target is viable. If it succeeds in becoming 'free of child mining', Kolwezi could then set an example for other towns to aspire to. The lessons learned will be essential for future success. Therefore only one prime site is recommended for this intervention.</i></p>
Objectives	<ul style="list-style-type: none"> • To eliminate child labour from the copper and cobalt mines of Kolwezi, Katanga • To engage a full spectrum of local actors in a grassroots initiative and local campaign, with a strong child-led component; • To understand and address the root drivers of child mining and to implement sustainable initiatives to prevent a recurrence of child mining after the project; • To link with other initiatives which are addressing individual components of the problem to provide a comprehensive and integrated approach to the problem; • To develop and disseminate guidelines on designing and implementing activities to reduce child mining.
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> • An update to existing baseline studies on the presence of child miners in Kolwezi; • Local actors empowered to play their legal and moral roles in the prevention of child mining; • All children who previously worked in the mines in the immediate Kolwezi area either in school, vocational training, or other income-generating activities which are not considered to fall within the 'worst forms of child labour'; • Government services taking a pro-active role around enforcing the ban on child labour in mines; • A lessons learned document / guidelines designing and implementing activities to reduce the incidence of child labour in mining.
Implementing partners	<p>Mayor of Kolwezi and local authorities; Governor of Katanga; <i>Ministre des Mines; Ministre de la Famille, Genre et Enfants; Division des Mines</i>; SAESSCAM; ASM Cooperatives; ASM Associations; Police; Judicial authorities; Gecamines; Large-scale mining companies; EU; UNDP; UNICEF; CASM partners; Solidarity Centre/Save the Children; Pact; Groupe One; Schools; Churches; Youth Groups; Women's associations; Local NGOs; Local businesses; Traditional authorities; others</p>
Potential funding partners	<p>EU; UNDP and other UN agencies such as UNICEF; other multi- or bi-lateral donor agencies; foundations; large-scale mining companies in Kolwezi; others</p>

Pilot Project 5	Appropriate technology in ASM gold recovery to reduce use of mercury
Pilot site	<p>South Kivu</p> <p><i>Potential sites include Walungu, Twangiza or other sites in South Kivu, and Mongbwalu, Aungbwa, Watsa and in Orientale. Walungu (Mugogo) is one of the potential sites for a Centre de Negoce therefore there would be synergies between the projects. Twangiza is on the Banro concession and the company has indicated its willingness to participate actively in the PROMINES project. The Oriental sites are all HQ sites for the JV partners on the OKIMON concessions therefore there is an increased potential for support from private sector partners.</i></p>
Objectives	<ul style="list-style-type: none"> • To engage local ASM communities in understanding the negative health and environmental impacts of the use of mercury such that they are motivated to seek alternatives; • To collaboratively identify, develop and trial mercury-reduced and/or mercury-free appropriate technologies which are locally accepted, inexpensive, locally sourced and easily replicable; • To assess the results of the trials and disseminate results to encourage uptake in other sites; • To link to international initiatives to learn and share best practice
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> • Measurable reduction in the use of mercury on the pilot project sites; • Guidelines on mercury reduction or elimination in ASM gold in the DRC developed and disseminated; • SAESSCAM agents enabled to act as local trainers for dissemination of the technology; • Small businesses established (if and where appropriate) on ASM sites to produce mercury-reduced gold recovery equipment or materials
Implementing partners	<p><i>Ministre des Mines; Division des Mines; SAESSCAM; UNEP-ASGM; CASM members; ASM Cooperatives; ASM Associations; Sous traitants; International/Local NGOs; Local businesses; others</i></p>
Potential funding partners	<p>Banro Foundation; AngloGold Ashanti; Mwana Africa; Randgold Resources; UN agencies; other multi- or bilateral donor agencies; others</p>

Global Activity 1	Dissemination and implementation of the mine law
Pilot site	National program implemented at all Pilot Sites
Objectives	<ul style="list-style-type: none"> • To harmonize DRC mine law with other national legislation pertaining to natural resource management and to standardize artisanal mining regulations across provinces; • To strengthen appropriate legal instruments that relate to artisanal mining; • To increase knowledge of the DRC mine law as it pertains to artisanal mining in order to contribute to the enabling environment for its enforcement; • To increase the capacity of state agents to play their legal roles in the artisanal mining sector and to exclude unofficial actors; • To create a knowledge base of major infractions of the mine law, the reasons for this, and an action plan to improve the application and respect of the law.
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> • A measurable improvement in knowledge of the mine law in all project sites and, where possible, beyond; • A suite of appropriate multi-lingual and multi-media materials developed and disseminated to a network of partners to enhance local knowledge of the mine law; • State agents involved in artisanal mining know their legal roles and responsibilities and are empowered to carry these out; • A measurable change reported showing that unofficial agents are being progressively excluded from artisanal mining and trading; • Local mechanisms strengthened or established to enable civil society monitoring and reporting of law enforcement and abuse.
Implementing partners	<i>Ministre des Mines; Ministre de l'Environnement; Ministre de l'Interieur; Ministre des Affaires Foncières; Division des Mines; SAESSCAM; CTCPM; CAMI ; State owned enterprises; Provincial authorities; Police; FARDC; AND; DGM; OFIDA; DGRAD; DGI; Judiciary ; ASM Cooperatives; ASM Associations; ASM Comptoirs; Sous Traitants; mining companies; International/Local NGOs; Traditional authorities; others</i>
Potential funding partners	EU; UN; other multilateral agencies; bi-lateral agencies

Global Activity 2	Strengthening the capacity of SAESSCAM
Pilot site	National program implemented at all Pilot Sites
Objectives	<ul style="list-style-type: none"> To assist SAESSCAM to become a competent, effective, respected state agent with the capacity and resources to manage the artisanal mining sector in the DRC such that it can credibly and measurably achieve its agreed objectives and play its essential role in transformation of the sector
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> A comprehensive review of SAESSCAM's mandate and operational units (with reference to roles in technical support and tax collection) and an audit of SAESSCAM's capacity to fulfil this mandate; A national plan for all aspects of financial, technical and personnel management developed and implemented; Recruitment, training, operations and performance-based monitoring process developed and implemented; Agreed SAESSCAM offices acting as pilot sites to undergo a complete organizational, technical, and financial restructuring to act as models for expansion of the program; A business plan for the financial operations of SAESSCAM developed and implemented at each site; Appropriate equipment being used and maintained by SAESSCAM at all pilot sites; Operating plans developed and implemented at all pilot sites governing how SAESSCAM works with other state agents and with the artisanal mining community in general; <i>Carte de Creuseur</i> issued to every artisanal miner at each pilot site with recommendations on how this can be achieved nationwide; All SAESSCAM agents at all pilot sites paid fully and on time; A significant and measurable improvement in the collection of legal taxes by SAESSCAM at all sites; Policies on integrity, corruption, and whistle-blowing developed and implemented at all sites
Implementing partners	<i>Ministre des Mines; Division des Mines; SAESSCAM; Provincial authorities; Police; ASM Cooperatives; ASM Associations; Small and large-scale mining enterprises; EU; UN agencies; ILO; CASM members, notably artisanal mining agencies in other Africa countries; International/Local NGOs; Traditional authorities; others</i>
Potential funding partners	EU; other multi-lateral donors; Small and large-scale mining enterprises; Investment of ASM taxes; GTZ; USAID; other bilateral donors; others

Global Activity 3	Monitoring ASM in the DRC
Pilot site	National program implemented at all Pilot Sites
Objectives	<ul style="list-style-type: none"> • To establish a publicly accessible database on artisanal mining activity in the DRC which is regularly populated with accurate data from competent sources; • To determine a current baseline of artisanal mining sites and activities in the DRC as the basis for ongoing monitoring of the sector; • To establish data and reporting protocols and indicators to be used by all artisanal mining interventions in the DRC
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> • An accurate estimate of the number of artisanal miners and all artisanal mining sites in the pilot provinces; • A publicly accessible database with credible information on mines, security and trade being managed by competent teams within SAESSCAM; • Protocols for all actors designing and implementing artisanal mining interventions in the DRC; • An active network of partners in other interventions contributing data to the national database; • Annual reports on the status of artisanal mining in the DRC in terms of numbers and distribution.
Implementing partners	<i>Ministre des Mines; Division des Mines; SAESSCAM; Provincial authorities; Police; ASM Co-operatives; ASM Associations; EU; MONUC; IPIS; International/Local NGOs; CASM; Small and large-scale mining enterprises; Information management companies; Traditional authorities; others</i>
Potential funding partners	EU; other multi-lateral donors; bilateral donors; Information management companies; others

Global Activity 4	Strengthening the role and security of women in artisanal mining
Pilot site	National program implemented at all Pilot Sites
Objectives	<ul style="list-style-type: none"> • To identify and support key women actors in the artisanal mining trade to ensure their legal status, to strengthen their business skills and networks, thereby to improve their status in the sector; • To create a network of ASM business-women to provide mutual support and capacity building; • To enable a peer visit and exchange between the new DRC ASM network with other ASM women's associations internationally; • To strengthen the business and financial capacity of women providing goods and services in ASM areas, including the opportunity to diversify their livelihoods; • To reduce the insecurity and vulnerability of women in ASM areas with particular reference to sexual and gender based violence (SGBV)
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> • A network of ASM business women established and linked internationally; • Improved financial status and livelihood options for women in pilot ASM areas; • Local campaigns against SGBV established with a recourse mechanism for women who have been victims • A measurable decrease in the rate of SGBV perpetrated against women in the pilot sites.
Implementing partners	<i>Ministre des Mines; Division des Mines; Ministre de la Famille, Genre et Enfants; SAESS-CAM; ASM Cooperatives; ASM Associations; Police; Judicial authorities; FARDC; Pact; Churches; Women's associations; Local NGOs; Local businesses; Traditional authorities ; others</i>
Potential funding partners	UN Agencies; multilateral donors; bilateral donors notably USAID; donors funding SGBV initiatives; foundations; women business leaders; womens' business associations; mining companies; others

Global Activity 5	Provision of financial services in artisanal mining areas
Pilot site	National program implemented at all Pilot Sites
Objectives	<ul style="list-style-type: none"> To increase the level of income artisanal miners save from their work and to assist them to transform this into capital which will give them greater freedom of choice; To reduce the negative impact of indebtedness in artisanal mining communities; To facilitate access to more formal microcredit systems for artisanal miners
Activities	As per the Activity Matrix
Results	<ul style="list-style-type: none"> A report on indebtedness in artisanal mining in the DRC prepared to provide a base-line for other interventions and a plan for going forward; Savings groups established for appropriate and interested artisanal miners at all pilot sites; Case studies developed and disseminated with appropriate guidance on how artisanal miners can improve their financial status
Implementing partners	<i>Ministre des Mines; Division des Mines; SAESSCAM; Ministre de Finance; CASM partners; SACCOS in other countries; International/Local NGOs; ASM Associations and Cooperatives; Financial institutions including banks and micro-credit organizations; others</i>
Potential funding partners	Multilateral donors; bilateral donors; foundations; financial institutions; mining companies; others

10.7 Implementation

Implementing a complex, multi-component project of this nature will be a challenge. There are several structures that PROMINES can consider:

- A coordinating partner could be selected for each province to have oversight of the program, ensure synergies, and subcontract appropriate local partners to deliver the project components. This would probably be cost-effective and would enhance cohesiveness between activities in the same area however it could risk creating 'silos' in the overall program.
- Partners could be selected by theme to work in multi-provinces on their individual components. This would probably increase quality control and standardization across activities however it could be expensive and lead to excessive communications and coordination requirements.
- A hybrid of these two could deliver the provincial-level cohesive teams but still include experts who work across the projects on the Global Activities and the Pilot Projects which occur in multiple sites.

Whichever structure is agreed upon, it will be highly advisable to have a national level coordination partner or PROMINES unit to oversee the implementation of the entire project. This partner/unit would be responsible for:

- Designing and implementing the process of partner selection;
- Holding multi-partner meetings;
- Coordinating work plans to ensure synergies and cost savings, and to avoid duplication of effort;

- Harmonizing approaches;
- Quality control;
- Ensuring that the correct protocols are understood and observed in all aspects of working with the government and that the necessary mandates (e.g. Manual de Procedure) are established for all state actors participating in the projects;
- Monitoring and evaluation including establishing standard indicators and realistic targets;
- Collating reports and producing regular progress updates according to the PROMINES reporting schedule;
- Learning, developing case studies, contributing material to PROMINES for external communications;
- Maintaining stakeholder contact databases;
- Designing and implementing the fundraising plan; networking with other donors to secure matched or leveraged funding;
- Overall budget monitoring and financial reporting

This partner/unit will integrate closely with other PROMINES team and each function should feed upwards into the overall PROMINES management. For example; monitoring and evaluation of the artisanal mining components will link directly to the person/team responsible for the overall PROMINES monitoring and evaluation process.

Another key responsibility of this unit will be in relation to ensuring the project's integrity. PROMINES is going to be subject to significant scrutiny by national and external actors, perhaps especially so for the artisanal mining components. It will therefore be of utmost importance to ensure that protocols for transparency and security are established and implemented with rigour. This will include, but will not be limited to:

- Risk analysis and management;
- Ensuring that appropriate security plans are in place for partners operating in high-risk areas;
- Maintaining the security of data and protocols on confidentiality where they are required;
- Overseeing communications protocols and a clear definition of decision making process;
- Establishing conflict of interest policies and protocols for disclosure of personal involvement in artisanal mining for all those involved in running PROMINES projects;
- Developing and disseminating whistle-blower policies and protocols;

10.8 Budget

Budget notes:

- I. The budget proposed is US\$31,510 million.
- II. The consultants are aware that the suite of activities and this total estimated cost exceeds the budget that is currently available. However, it was agreed that it was appropriate to present the best possible artisanal mining program for Phase 1 of the PROMINES project, rather than to be constrained by the limits on the current funds available. It seems very likely that further funds will be contributed to PROMINES by other donors, plus it is anticipated that active fundraising should be undertaken to bring new partners to the table. Many of the activities proposed in the Artisanal Mining Study will potentially be attractive to other donors given their obvious social, environmental and security dimensions. A strong fund-raising plan should be developed early in the project.
- III. The budget is laid out on a matrix so that it can be considered in two ways:
 - A. Activities are allocated to the PROMINES components in order that cost allocations that can be considered under other PROMINES budget lines. For example, the restructuring of SAESS-CAM can be allocated to the general budget for “Sector Management Capacity Building”
 - B. The Activities are also listed by site so that the overall investment in any one site (or Province) can be clearly seen. Cost-savings can be achieved if site management is allocated to a single organization which can carry out multiple activities with the same staff and overheads.
 - C. Thus the cost savings of eliminating (or postponing) any activity or site can be easily calculated.
- IV. The budget is proposed for three years, not for the full five years of Phase 1. This is because it is assumed that a mid-term review and re-budgeting process will take place during Phase 1 to take into account the successes, challenges, learnings and changes in funding which will occur.
- V. Activities and sites can be prioritized according to agreed needs. Therefore multiple activities can start at national level and one or two sites with a plan for expansion to the other sites as more funds become available.
- VI. The sites identified in the budget conform to the Pilot Sites and Global Activities planning as follows:
 - A. National: most of the Global Activities need national level input and some of the Pilot Projects will also require national level research, support, policy, etc.
 - B. Katanga:
 - i. Lubumbashi is the Provincial capital and will therefore be the main point of coordination for the Global Activities at provincial level;
 - ii. Kawama is identified as the Artisanal Mining Zone site for Katanga;
 - iii. Kolwezi is identified as the site of the project to eliminate child labour.
 - C. South Kivu:

- i. Bukavu is the Provincial capital and will therefore be the main point of coordination for the Global Activities at provincial level as well as being integral to the project on Traceability, Certification and Access to Markets;
 - ii. Twangiza is identified as a potential site for the environmental project on Mercury Reduction. This could transfer to Walungu/Mugogo however that might lose out on the potential benefits of working with Banro;
 - iii. Walungu/Mugogo is identified as a potential site for an Artisanal Mining Zone as this cannot be established on the Banro concession. It is also the potential site for a MONUC *Centre de Negoce* and therefore can be integrated into the project for Traceability, Certification and Access to Markets.
 - iv. Nyabibwe is identified as a potential site in the Traceability, Certification and Access to Markets project (noting that this project needs to start up in a cassiterite or coltan mine, not just in a gold mine)
- D. North Kivu:
- i. Goma is the Provincial capital and will therefore be the main point of coordination for the Global Activities at provincial level as well as being integral to the project on Traceability, Certification and Access to Markets;
 - ii. Bisie, as one of the most important artisanal mining zones in the province, is identified as a potential Artisanal Mining Zone as well as being a site for the Traceability, Certification and Access to Markets project.
 - iii. Rubaya has been identified as a possible site for a *Centre de Negoce* and therefore has been included for issues such as technical training, etc. It is also a site which is currently not operating within the official artisanal mining sector (as there are no state agents deployed there), therefore it is a key site for consideration and requires a higher level of support to SAESSCAM.
- E. Orientale:
- i. Bunia is the District capital of Ituri and will therefore be the main point of coordination for the Global Activities at provincial level given that the project will focus on Ituri District, not on the province as a whole. Bunia is also a main office for OKIMO for the project on Relations between the SOEs, Companies and Artisanal Miners. For budget purposes, activities in Bunia and Mongbwalu are merged as accessibility between the two areas is easy.
 - ii. Mongbwalu is the headquarters of AngloGoldAshanti on concession 40. Therefore this is a key site for the project on Relations between the SOEs, Companies and Artisanal Miners. An allocation has also been made for working on Mercury Reduction.
 - iii. Djalasegia is close to the headquarters of Mwana Africa at Aungbwa on concession 39. Therefore this is a key site for the project on Relations between the SOEs, Companies and Artisanal Miners. An allocation has also been made for working on Mercury Reduction.

- iv. Watsa/Durba is the headquarters of Randgold Resources on concession 38. Therefore this is a key site for the project on Relations between the SOEs, Companies and Artisanal Miners. An allocation has also been made for working on Mercury Reduction.
 - v. None of the above sites are suitable for an Artisanal Mining Zone as they are all on sites which already have mining title. Therefore a fourth site has been added for Ituri. This needs to be identified.
- VII. The costs shown relate to estimates based on implementation on the ground, based on the consultants' experience of similar projects. These do not include administrative overhead therefore the acceptable PROMINES % for administration and overhead will need to be added.
- VIII. The figures assume that implementation will be primarily by NGOs, other than in the case of SAESS-CAM's capacity where an agency experience in government restructuring will be required. If the implementing partners are not NGOs (e.g. corporate contractors), costs may be higher.
- IX. Where local NGOs will be partners, a system of small grants distribution and management will need to be designed.
- X. Where activities can be localized in one area, cost savings may be achieved through having single partners undertake multiple activities.
- XI. This budget does not include the costs of establishing an Artisanal Mining Coordination unit or contracting this to an external partner.
- XII. Activities related to sharing information from the PROMINES projects with the international community (through printed materials, conferences, research papers, exchange visits, etc) have not been included as it is presumed that these can come under the larger PROMINES information dissemination and networking budget.

Table 16: Detailed Logframe and Arrangements for ASM Results Monitoring

OVERARCHING GOAL: To improve governance of the mining sector and increase its contribution to economic growth, sustainable development and poverty reduction										
Overarching Indicators ¹	TARGET VALUES					DATA COLLECTION AND REPORTING				Assumptions
	Baseline 2009 (2008)	Milestone 2010/11 ¹	Milestone 2011/12	Milestone 2012/13	Milestone 2013/14	Target 2014 (2015)	Frequency of Reporting	Source & MoV/Data Collection Instruments	Responsibility for Data Collection	
1 Real annual GDP growth	% 2.7% (2009) 6.2% (2008)	5.4%	7.2%	6.9%	8.2%	6.8%	Biannual reviews of PRGF	IMF reports	WB/DFID to collect	
3 Deviance between officially recorded fiscal receipts from mining (copper and cobalt) sector and those declared by private sector mining companies	% Deviations for Copper & Cobalt: 4.4% for Redevance miniere, 1.6% for Income tax based taxes ² Overall deviance for Copper & Cobalt: 15% (EITI report on 2007 data)	Deviance for Copper & Cobalt: 15%	Deviance for Copper & Cobalt: 10%	Deviance for Copper & Cobalt: 7%	Deviance for Copper & Cobalt: 5%	Deviance for Copper & Cobalt: 0% Overall deviance of 5% for mineral substances covered by EITI reports ³	Annual	EITI Reconciliation Reports	WB/DFID to review DRC's EITI reports as well as reports issued by the International EITI Secretariat	
4 Share of domestically financed central expenditure for poverty focussed sectors (education, health, agriculture, rural development, infrastructure & public works) ⁴	% 12% (2010 budget) ⁴	At least no reduction over the baseline	At least no reduction over the baseline	At least no reduction over the baseline	At least no reduction over the baseline	At least no reduction over the baseline	Budget annual; Expenditure reports bi-annual	DRC national budget and expenditure reports	WB/DFID to review reports	
6 Mining sector contribution to GDP growth ²	% 23.7% (2008) -61.1% (2009) ⁵						Annually	WB/IMF reports	WB/DFID to review reports	

Continued.

PROJECT DEVELOPMENT OBJECTIVE/PURPOSE: To strengthen the capacity of key institutions to manage the minerals sector, improve the conditions for increased investments and revenues from mining, and help increase the socio-economic benefits from artisanal and industrial mining										
Project Outcome Indicators	Baseline 2009 (2008)	Milestone 2010/11 ¹	Milestone 2011/12	Milestone 2012/13	Milestone 2013/14	Target 2014 (2015)	DATA COLLECTION AND REPORTING			Assumptions/ Comments
							Frequency of Reporting	Source & MoV/Data Collection Instruments	Responsibility for Data Collection	
<i>Strengthened institutional capacity to manage the sector in an efficient, accountable and transparent manner</i>										
Performance of key institutions in the minerals sector to enforce the legal and regulatory framework	The existing framework is poorly enforced	Weaknesses and gaps in existing framework and how it is enforced identified	Proposals for improvements to the framework and how it is enforced agreed	Recommended improvements adopted by the government	Revised framework adopted by parliament, promulgated by the president and published in the official journal	Improved framework effectively enforced ⁶	Biannual project reporting	Project monitoring reports ⁷ , Consultancy Reports, Steering Committee Meeting Reports	PIU	Political will for reform exists All government services involved in the mining sector agree on need for reform
Status of transparency and accountability mechanisms	Very limited availability of data; Debate largely dependent on NGO reports or poor quality media reporting; Little informed public debate	DRC achieves EITI validation which includes the dissemination and discussion of 1st EITI Reconciliation Report (national and provincial levels)	Project accountability platform launched	Dissemination and discussion of EITI Reconciliation Reports (national and provincial levels)	Dissemination and discussion of EITI Reconciliation Reports (national and provincial levels)	Dissemination and discussion of EITI Reconciliation Reports (national and provincial levels)	Annually	EITI reporting Media reporting Project monitoring reports	PIU	EITI process remains on track

Continued.

Improved conditions for increasing investment in and revenues generated by the mining sector										
Private investments in the mining sector (number of investments over 10 million dollars)	23 declared investments over \$10 million in Copperbelt ⁸	Maintain or increase over baseline	Maintain or increase over baseline	Maintain or increase over baseline	Maintain or increase over baseline	Maintain or increase over baseline	Maintain or increase over baseline	Ministry of Mines website	WB/DFID to review data from website	Public and private investments in infrastructure continue
Fiscal revenues from the mining sector	Revenues from the mining sector collected at export point \$75 million (2008) Overall mining tax collected in 2007 for copper & cobalt: \$70 million (EITI report) ⁹	% increase over baseline	% increase over baseline	% increase over baseline	% increase over baseline	% increase over baseline	Annually	Reports from the Ministry of Finance EITI reports, reports from the Ministry of Mines, NGOs	PIU	Political will for reform exists at national and provincial levels Resistance to reform within existing structures and institutions can be overcome
<i>Increased socio-economic benefits of artisanal and industrial mining for communities in project areas</i>										
Working and living conditions of artisanal and industrial mining communities in project areas	Very limited availability of data. Reports on specific sites suggest that: 20% of diggers in Kolwezi (Katanga) are children, 40% of people involved in ASM (including support activities) are women. On average, copper & cobalt diggers in Katanga earn \$100-\$120 per month. Detailed indicators, baseline, milestones and target will be established as part of project monitoring system ¹⁰ (including household consumption in targeted mining communities)	TBD	TBD	TBD	TBD	TBD	TBD	Project monitoring system reports 1-2-3 survey reports	PIU	Security in project areas is maintained
INPUTS (£)	DFID (£)	Govt (£)	World Bank (£)	Total (£)	DFID SHARE (%)					
	27,000,000		34,000,000	61,000,000	44.25					
INPUTS (HR)	DFID (FTEs)									
	70% (years 1-2), 50% thereafter									

Continued.

INTERMEDIATE OUTCOME INDICATORS/OUTPUTS	TARGET VALUES					DATA COLLECTION AND REPORTING			Assumptions/ Comments (critical issues will be monitored through project monitoring system ⁵)	
	Baseline 2009 (2008)	Milestone 2010/11	Milestone 2011/12	Milestone 2012/13	Milestone 2013/14	Target 2014 (2015)	Frequency of Reporting	Source & MoV/ Data Collection Instruments		Responsibility for Data Collection
	<i>Component A. Improve basic conditions for access to mineral resources to encourage increased investments in and revenues generated by the mining sector</i>									
The geodesic system	Very limited geodesic network with 35 points exists in the south; system does not exist in north and centre of the country	Detailed plan for national coverage developed	Network upgrade being carried out	Geodesic network covers the whole country	Geodesic network has achieved target density (as defined in plan) ¹¹	Geodesic network covers the whole country has achieved target density (as defined in plan) ¹¹	Biannual project reporting	Project monitoring reports, consultancy reports	PIU	Technical feasibility of upgrades to the geodesic system and national geological database
11	Availability of geological information for the country	Contract for design of geological database awarded	Design of geological database completed	Regional Geophysical and Geological Surveys over key areas with minerals potential carried out	National geological database fully operational ¹²	Database publicly accessible and range of maps produced	Biannual project reporting	Project monitoring reports, outputs from the database, Ministry of Mines website	PIU	Upgrades to the geodesic system and national geological database can be carried out within reasonable budget
12	Communication and information flow within the sector including consultations with civil society	Ministry's communications with stakeholders in government, the private sector and civil society unplanned and ad hoc which hampers the development of a coherent vision for the future of the sector	Satisfactory implementation of the strategy ⁹	Ministry organises at least 4 communications events (newsletters, roundtables, conferences)	Ministry organises communications events including a national roundtable discussion on the future directions of the sector	Ministry communicates regularly and professionally with all relevant stakeholders	Biannual project reporting	Project Monitoring Reports from the Ministry of Mines Consultancy Reports Written Communications Material	PIU	Commodity prices remain stable
16	Impact Weighting: 25%									
INPUTS (£)	DFID (£)	8,694,000	Govt (£)		World Bank (£)	10,948,000	Total (£)	19,642,000		Risk Rating: M
INPUTS (HR)	DFID (FTEs)	20% of DFID's HR inputs								DFID SHARE (%)
										44.25

Continued.

Component B. Strengthen the Government's capacity to manage the mineral sector										
Presence and capacity of CAMI (Mining Titles Registry)	No functional CAMI operations at provincial level	Plan for strengthening CAMI's presence in 3 target provinces developed and endorsed by the Minister of Mines	1 fully-functioning ¹³ CAMI operation at provincial level	2 fully-functioning CAMI operations at provincial level	3 CAMI offices fully operational at provincial level providing quality information and services within agreed timeframes	Fully-functioning CAMI operations at national level and in target provinces	Biannual project reporting	Reports from Ministry of Mines and COPIREP Consultancy Reports CAMI website Spot check visit reports Project Monitoring Reports	PIU	Political will for reform exists Resistance to reform within existing structures and institutions can be overcome
14	Capacity and performance of SAESSCAM (Government Service to Support Artisanal Miners)	SAESSCAM presence and capacity weak and not fulfilling its remit to provide support services to artisanal miners	National plan for SAESSCAM restructuring developed	National plan for SAESSCAM restructuring adopted by GoDRC	Satisfactory ¹¹ implementation of national plan	National plan fully implemented, SAESSCAM reformed and fulfilling its remit to provide support services to artisanal miners	Biannual project reporting	Reports from Ministry of Mines and SAESSCAM, Consultancy Reports with SAESSCAM staff, NGOs, local communities, artisanal miners during Supervision Project Monitoring Reports	PIU	Political and strategic stability to see through complex reform processes is maintained
15	Status of technical and professional training institutes and programmes in Katanga	Technical institutes in Katanga are run down and their programmes are not adapted to modern industry requirements	Improvement plan for technical institutes and university programmes developed and agreed	Upgrading of selected institutes and university programmes being carried out in accordance with agreed plan ¹¹	Technical apprenticeships delivered Start of long term professional education programs	Technical institutes in Katanga providing competent workforce for mining operations Significant increase in local hire versus expatriates by mining companies ¹⁴	Biannual project reporting	Reports from provincial education services and from training centres themselves	PIU	Training centres can be upgraded within reasonable budget
13	Impact Weighting: 30%									Risk Rating: H
	INPUTS (£)	DFID (£) 6,912,000	Govt (£)	World Bank (£) 8,704,000	Total (£) 15,616,000					DFID SHARE (%) 44.25
	INPUTS (HR)	DFID (FTEs) 30% of DFID's HR inputs								

Continued.

Component C. Strengthen the Government's capacity and accountability in mining tax collection										
Production of EITI reconciliation reports for increased transparency of mining sector	1st EITI reconciliation report for copper and cobalt produced covering FY 2007	Government and mining sector companies provide necessary information for EITI reconciliation for FYs 2008 and 2009	Government and mining sector companies provide necessary information for EITI reconciliation report for FY 2010. Recommendations from previous report acted on.	Government and mining sector companies provide necessary information for EITI reconciliation report for FY 2011. Recommendations from previous report acted on.	Government and mining sector companies provide necessary information for EITI reconciliation report for FY 2012. Recommendations from previous report acted on.	Government and mining sector companies provide necessary information for EITI reconciliation report for FY 2013. Recommendations from previous reports acted on.	Annually (2 FYs to be covered in 2010 to clear backlog)	EITI Reconciliation Reports	PIU, WB/DFID, local EITI Secretariat	EITI process remains on track (need to be careful - EITI reports aren't always produced annually)
Status of tax collection framework for mining sector	Multiple legal taxes - not consistently applied; numerous additional 'unofficial' taxes also applied	Inventory of mining sector related taxes (formal and informal) and procedures for payment. Training programme to reinforce proper implementation of tax regime developed	Modelling of mining taxation revenues	Training programme to reinforce implementation of national mining tax regime rolled out		Tax regime effectively and consistently applied in line with the law ⁶	Biannual project reporting	Reports from the Ministry of Finance, EITI reports, reports from the Ministry of Mines, NGOs Project Monitoring Reports; Feedback from private sector	PIU, WB/DFID	Effective measures are taken to tackle corruption at all levels Roles and responsibilities can be clarified between agencies and between central & provincial governments
Impact Weighting: 15%										
INPUTS (£)	DFID (£) 1,512,000		Govt (£)		World Bank (£) 1,904,000			Total (£) 3,416,000		Risk Rating: H DFID SHARE (%) 44.25
INPUTS (HR)	DFID (FTEs) 10% of DFID's HR inputs									

Continued.

Component D. Develop innovative approaches to improve socio-economic impacts of artisanal and industrial mining in three provinces										
Monitoring of social and environmental impacts of industrial mining activities involving the participation of local communities	Social and environmental impacts of mining activities not well understood and managed	Strategic Environment and Social Assessment (SESA) carried out in target provinces. Identify suitable mechanisms for community participation	Policy and institutional reforms to reduce environmental and social risks from expansion of the mining sector identified and agreed with community involvement	Risk assessment of selected polluted sites in Katanga carried out with community involvement	Assessment of mechanisms used to involve community participation in monitoring social and environmental impacts of mining activities. Results disseminated nationally	Environmental management and community participation in mining sector improved ⁶	Biannual project reporting	Project monitoring Reports, Consultancy the Ministry of Environment, NGO reports	PIU	Political will for reform exists at national, provincial and local levels Complementary reforms and investments in social sectors, infrastructure & SSR are carried out
Formalization of artisanal mining ¹⁵	Poor conditions (economic, social, health and safety, security, etc) in designated artisanal mining sites; Proportion of registered production for gold is between 2% and 10% in 2008 (various sources)	Action plan to strengthen regulation and management of the ASM sector and to improve conditions on and around ASM sites developed and adopted	Successful implementation of at least two pilots ⁷	Review of lessons and start replication in other areas	Improved working conditions on targeted ASM sites	Conditions (economic, social, health and safety, security, etc) in designated artisanal mining sites improved	Biannual project reporting	Reports from SAESSCAM, Consultancy reports, NGOs, project monitoring reports; 1-2-3 survey	PIU	Security situation in Eastern DRC improves Multi-stakeholder agreement to mining development funds can be achieved
Impact Weighting: 25%										
INPUTS (£)	DFID (£) 4,455,000		Govt (£)		World Bank (£) 5,610,000			Total (£) 10,065,000		DFID SHARE (%) 44.25
INPUTS (HR)	DFID (FTEs) 30% of DFID's HR inputs									

Continued.

E. Establish monitoring and evaluation (M&E) framework for evaluating project implementation and its impact

M&E framework established	No M&E framework	M&E framework developed and agreed with all relevant stakeholders; baseline data collection	Implementation of M&E system	Implementation of M&E system	Implementation of M&E system	Well functioning M&E system delivering quality reports for all logframe indicators	Biannual project reporting	Consultancy report, Project Monitoring Reports, Aide Memoires from Supervision Missions, M&E reports	PIU, WB/DFID	Suitable M&E infrastructure can be created
Availability of household economic data for mining areas	Non-existent	Mining areas covered in 1-2-3 survey	Biannual project monitoring reports produced Biannual project supervision missions with participation from range of stakeholders	Biannual project monitoring reports produced and information/ lessons fed back into project implementation Biannual project supervision missions with participation from range of stakeholders	Biannual project monitoring reports produced and information/ lessons fed back into project implementation Biannual project supervision missions with participation from range of stakeholders	Repeat survey carried out Data available after project end	every 2-3 years	1-2-3 survey reports	DRC Statistical Agency, WB	1-2-3 surveys will be carried out as planned
Impact Weighting: 5%										
INPUTS (£)		DFID (£)	Govt (£)		World Bank (£)		Total (£)		DFID SHARE (%)	
		3,159,000			3,978,000		7,137,000		44.25	
INPUTS (HR)	10% of DFID's HR inputs									

0 These indicators were selected on the basis of being most relevant for the project. DFID DRC and the WB regularly monitor a broader set of social, economic and governance indicators (e.g. HDI, Doing Business, Transparency Corruption Perception Index) which will help to put the project into its broader context

1 Progress in 2010 will be measured in 2011 etc.

2 Baseline figures from DRC's very first EITI report for 2007 and hence accuracy in doubt. There are indications that differences for 2008 are bigger. As tax take increases it is also likely that efficiency of tax collection decreases.

3 The project monitoring system will capture data for other mineral resources as soon as they are captured by EITI reporting

4 Overall aim is to increase the share of domestically financed central expenditure for poverty focussed sectors. GoDRC currently working on next PRS which should allow us to set realistic milestones

5 Not meaningful to set targets, but will be monitored to gauge mining sector's contribution to GDP. A reduction over time might be a positive sign of economic diversification & reducing reliance on mining for growth
6 Performance will be assessed as satisfactory (or otherwise) during bi-annual PROMINES supervision missions as well as through ongoing monitoring of the sector by WB & DFID staff

7 TA resources will be provided to the PIU to develop and implement a robust project monitoring system. Design of this will happen between WB approval and project effectiveness. Indicators will be disaggregated by area and gender. Will also monitor critical assumptions.

8 This figure includes project at feasibility stage. Accurate baseline will be confirmed during first six months of project implementation as part of the M&E system

9 2008 & 2009 data for copper & cobalt will be collected through EITI process prior to project effectiveness. Consolidated baseline for this indicator will be confirmed during first six months of project implementation as part of the M&E system

10 1-2-3 survey to cover mining areas will be conducted in 2010 to provide baseline data. Baseline indicators will be disaggregated by area and gender and integrated into project's monitoring system.

11 Performance in implementing the plan will be assessed as satisfactory (or otherwise) during bi-annual PROMINES supervision missions

12 Supervision staff will perform searches using database to confirm its functionality

13 Spot checks will be carried out whereby requests are made of CAMI offices to test their ability to provide the services expected from them under the law. Performance will also be benchmarked against the improvement plan carried out the year before

14 The project monitoring system developed will capture progress and impact and will disaggregate by area, gender

15 Working and living conditions of artisanal miners (approx. 80% of the sector) are very bad largely due to inability of mining sector institutions to manage and support this sector.

GROUPE 1: Production, valeur ajoutée, et accès au marché des minerais

1. Quel est le niveau actuel de la production, la valeur ajoutée et l'accès au marché des minerais issus de l'exploitation minière artisanale?
2. Quels sont les plus grands défis (barrières) qui limitent l'augmentation de la production en volume, la valeur ajoutée et l'accès au marché des minerais issus de l'exploitation minière artisanale?
3. Quelles mesures réalistes, prioritaires – sans, ou avec, appui extérieure – doivent être prises rapidement pour améliorer la production, la valeur ajoutée et l'accès au marché des minerais issus de l'exploitation minière artisanale?

Comment améliorer la production sans appui extérieur ?	Comment améliorer la production avec appui extérieur ?
Qui peut/va faire ça?	Qui peut/va faire ça?
Comment améliorer la valeur ajoutée sans appui extérieur ?	Comment améliorer la valeur ajoutée avec appui extérieur ?
Qui peut/va faire ça?	Qui peut/va faire ça?
Comment améliorer l'accès au marché sans appui extérieur ?	Comment améliorer l'accès au marché avec appui extérieur ?
Qui peut/va faire ça?	Qui peut/va faire ça?

GROUPE 2: Conditions actuelles de travail dans les sites de l'exploitation minière artisanale

1. Quels sont les intervenants formels et informels dans des mines artisanales et quelles sont leurs responsabilités ? Ont-ils les moyens pour le faire?

Acteurs formels	Acteurs informels
Responsabilités des acteurs formels	Responsabilités des acteurs informels
Les moyens pour accomplir leurs responsabilités	Les moyens pour accomplir leurs responsabilités

2. Quels sont les principaux problèmes qui rendent difficiles les conditions de travail de l'exploitation minière artisanale dans notre milieu?
3. Quels sont les rapports positifs et négatifs entre l'exploitation minière artisanale et l'exploitation minière industrielle ? Comment les conflits potentiels pourraient-ils être réduits et les synergies maximisées?

Rapports positifs	Rapports négatifs
Comment maximiser la synergie?	Comment réduire les conflits?

4. Quelles mesures réalistes prioritaires doivent être prises rapidement – sans ou avec appui extérieur - pour améliorer la situation?

Comment améliorer les conditions de travail dans les sites d'exploitation minière artisanale sans appui extérieur?	Comment améliorer les conditions de travail dans les sites d'exploitation minière artisanale avec appui extérieur?
Qui peut/va faire ça?	Qui peut/va faire ça?

GROUPE 3: Contribution économique de l'exploitation minière artisanale

1. Quelle est la place actuelle de l'exploitation minière artisanale dans l'économie locale, provinciale et nationale ?

Economie locale	Economie provinciale	Economie nationale
-----------------	----------------------	--------------------

2. Comment les taxes de l'exploitation minière artisanale devraient être collectées et par qui ? Devraient-elles être réinvestir dans le secteur et, si oui, comment?
3. Comment la décentralisation affecte-t-elle les revenus de l'exploitation minière artisanale?
4. Quelles mesures réalistes prioritaires doivent être prises rapidement – sans ou avec appui de l'extérieur – pour améliorer la contribution économique de l'exploitation minière artisanale?

Comment améliorer la contribution économique de l'exploitation minière artisanale sans appui extérieur?	Comment améliorer la contribution économique de l'exploitation minière artisanale avec appui extérieur?
Qui peut/va faire ça?	Qui peut/va faire ça?

GROUPE 4: Aspects sociaux et environnementaux

1. Quels sont les principaux problèmes sociaux et environnementaux causés par l'exploitation minière artisanale?
2. Comment l'exploitation minière artisanale contribue-t-elle au développement socio-économique? Comment cela peut-il être amélioré?
3. Quels sont les activités alternatives concurrentielles à l'exploitation minière artisanale?
4. Qu'est-ce qui empêche ou facilite le développement des activités alternatives concurrentielles?

Quelles mesures réalistes prioritaires – sans ou avec appui extérieur - doivent être prises rapidement pour améliorer les aspects sociaux et environnementaux? Comment améliorer les aspects sociaux et environnementaux de l'exploitation minière artisanale sans appui extérieur?	Comment les aspects sociaux et environnementaux de l'exploitation minière artisanale avec appui extérieur?
Qui peut/va faire ça?	Qui peut/va faire ça?

Etude sur l'Exploitation Minière Artisanale de PROMINES
Questionnaire sur les Service / Groupe / Business de ASM

1. Chercheur: _____ Date: _____
2. Nom de l'agence / groupe / business: _____
3. Adresse: _____
4. Nom de la personne interviewée & titre: _____
5. Téléphone: _____ Email : _____
6. Genre : _____ Age : _____ Dépendants : _____ Durée en ASM : _____
7. Statistiques disponibles liées à la production et gestion de l'ASM

Services gouvernementaux	Coopératives Associations	Processeurs Commerçants	Autres agences (e.g. NU, Sécurité, ONGs)
Quel est votre rôle de mineur artisanal ? Staff et leur capacité ? Quel équipement et ressources financiers avez vous pour faire votre travail? Gestion de la zone ASM? Nombre de mines ASM? Nombre de creuseurs? Statistiques sur les aspects sociaux des ASM (enfants, santé, SGBV, accidents, environnement)? Statistiques de production et valeur ajouté d'ASM? Statistiques d'exportation? Taxes & revenus des ASM?	Quel est votre rôle de mineur artisanal? Combien de membres? Qui sont les membres? Dans quelles mines? Statistiques de production? Statistiques de valeur ajouté? Statistiques d'exportation? Statut légal?	Sources des matières premières? Volume & grade par jour / semaine / mois? Valeur par volume & grade par jour / semaine / mois? Combien d'employés ? Licences?	Quel est votre rôle de mineur artisanal? Dans quels domaines de ASM travaillez-vous? Combien d'incidents ASM? Statistiques sur les aspects sociaux (enfant, santé, SGBV, accidents, environnement)?

8. Copies de documents, cartes, rapports:
9. Quels sont les problèmes principaux que vous rencontrez dans votre travail en ASM et qu'est-ce qui aiderait à améliorer cette situation pour vous?
10. Quelle est l'importance économique de l'ASM et comment cela pourrait-il être amélioré ?

11. Quels sont les aspects négatifs (sociaux, politique, environnementaux, etc) principaux de l'ASM et comment pourraient-ils être résolus ?
12. Vos recommandations pour entreprendre des démarches pratiques et qui va les faire?
13. Autres questions et réponses?
14. Observations du chercheur

Etude sur l'Exploitation Minière Artisanale de PROMINES
Rapport du Profil de Mine

1. Chercheur: _____ Date: _____
2. Nom de l'agence / groupe / business: _____
3. Location de la mine: _____
4. Coordonnées GPS: _____
5. Distance vers une route qui peut être utilisée par un véhicule: _____
6. Propriétaire de la mine: _____
7. Age de la mine & niveau comparatif d'activité: _____
8. Minerais produit: _____
9. Nombre de mineurs artisanaux en fonction: _____
10. Licences ou cartes (mine, creuseurs, négociants): _____
11. Niveau d'extraction mécanisée: _____
12. Niveau de développement: _____
13. Normes de santé et sécurité:
 - a. A ciel ouvert ou en souterrain: _____
 - b. Profondeur des tunnels et état du système de soutien: _____
 - c. PPE: _____
 - d. Nombre d'accidents & décès: _____
 - e. Utilisation de mercure? Produits chimiques ? Explosifs: _____
14. Impact environnemental: _____
15. Acheteurs principaux sur le site: _____
16. Destination du matériel (matière) après la vente au site: _____
17. Production depuis la mine (par fréquence, grade et poids): _____
18. Prix d'achat actuel à la mine (par grade et poids): _____
19. Coopératives ou associations: _____

20. Présence d'agents gouvernementaux (quels services): _____

21. Présence d'agents de sécurité (quelles forces): _____

22. Taxes / charges payées: _____

Par qui	A qui	Combien	A quelle fréquence

23. Présence d'enfants (% estimé): _____

24. Proximité de village / camp: _____

25. Population de village / camp: _____

26. Rôles évidents (visible) des femmes: _____

27. Autres observations: _____



PROMINES

*Projet de la Bonne Gouvernance du Secteur Minier
Comme Facteur de Croissance*

Des Zones d'Exploitation Artisanale

Conditions (Code Minier Art.109)

Lorsque les facteurs techniques et économiques qui caractérisent certains gîtes de minerais ne permettent pas d'en assurer une exploitation industrielle ou semi-industrielle, mais permettent une exploitation artisanale, de tels gîtes sont érigés, dans les limites d'une aire déterminée, en zone d'exploitation artisanale.

Un périmètre minier faisant l'objet d'un titre minier en cours de validité ne peut pas être transformé en zone d'exploitation artisanale. Tant qu'une zone d'exploitation artisanale existe, aucun titre minier ne peut y être octroyé à l'exception de:

- Un permis de recherches demandé par un groupement des exploitants artisans;
- La Direction de Géologie qui peut à tout moment procéder aux travaux de prospection et de recherches dans les zones d'exploitation artisanale.

Coopérative (Règlements Minier Art.234)

Les groupements d'exploitants artisans qui désirent procéder à la recherche dans la zone d'exploitation artisanale à l'aide de procédés industriels ou semi-industriels sont tenus de se constituer en coopérative et solliciter auprès du Ministre des Mines agrément au titre de coopérative minière. La coopérative doit être composée de personnes détentrices de cartes d'exploitant artisanal et le groupement doit avoir la forme d'une association sans but lucratif.

Fermeture (Code Minier Art.110)

Si les facteurs qui ont justifié l'institution d'une zone d'exploitation artisanale ont cessé d'exister. Cette décision est notifiée au Cadastre Minier qui en informe les exploitants artisans qui sont tenus de libérer la zone d'exploitation artisanale dans les soixante jours. Les exploitants artisans disposent d'un droit de préemption pour solliciter un permis en vue d'une exploitation à petite échelle, ce dans un délai de trente jours.

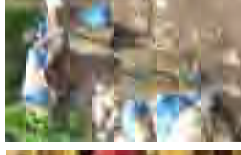
Autorités compétentes (Code Minier Art. 111, 10, 11, 14, 114)

- **Le Ministre** institue les zones d'exploitation artisanale, agréé et retire l'agrément des comitours d'achat; délivre les autorisations de traitement / transformation des produits d'exploitation artisanale; agréé des coopératives ;
- **Le Gouverneur de Province** délivre les cartes de négociants des produits d'exploitation artisanale;
- **Le Chef de Division Provinciale des Mines** délivre les cartes d'exploitant artisanal ; retire la carte après une mise en demeure de trente jours, ce pour tout manquement aux obligations du détenteur de la carte;
- **SAESSCAM** est un service technique chargé de l'encadrement et de l'assistance du 'small-scale mining' ou production à petite échelle.

L'Essentiel sur l'Exploitation Artisanale de Minerais dans le Code Minier de RDC

Définition de l'exploitant artisanal

Activités d'exploitation des minerais aux moyens des outils rudimentaires, et des méthodes non industrielles, à laquelle tout Congolais peut se livrer, délimitées en surface et en profondeur jusqu'à 30 m au maximum.



Admissibilité (Code Minier Art.26, 27)

Tout Congolais ayant l'âge de 18 ans peut acquérir et détenir les cartes d'exploitant artisanal ou de négociant. Il est interdit pour les personnes suivantes de faire l'exploitation artisanale ou le commerce des minerais

- Fonctionnaires de l'Etat (forces armées, magistrats, la police, sécurité, employés des organismes publics);
- Toute personne frappée d'incapacité juridique;
- Toute personne condamnée définitivement pour des infractions minières et de carrières ou celles liées aux activités économiques y afférents pendant dix ans;
- La personne à laquelle la carte d'exploitation artisanale ou de négociant a été retirée et ce, pendant trois ans;
- La personne à laquelle l'agrément au titre des comitours d'achat et de vente des minerais d'exploitation artisanale a été retirée et ce, pendant 5 ans.

Obligation détenteur de la Carte d'Exploitant Artisanal (Code Minier Art.112)

Respecter les normes applicables à son exploitation (sécurité, hygiène, utilisation de l'eau et protection de l'environnement), et indemniser les exploitants agricoles pour tout dommage engendré par son activité.

Transformation, transport et commercialisation de produits de l'exploitation artisanale (Code Minier Art.113, 115, 116, 117)

La carte d'exploitant artisanal n'autorise pas son détenteur de transformer les produits de l'exploitation artisanale, sauf autorisation préalable accordée par le Ministre. Les exploitants artisans ne peuvent vendre leurs produits miniers qu'aux négociants, aux marchés boursiers, aux comitours ou organismes agréés ou créés par l'Etat. Vente des produits miniers aux artistes, agréés par le Ministère de la Culture et des Arts, munis d'une autorisation spéciale de l'administration des mines.

Les 12 Articles du Code de Conduite de l'Exploitant Artisanal

L'engagement de l'exploitant artisanal (Art.1)

L'exploitant artisanal s'engage à :

- Conserver les aménagements apportés par les concessionnaires fonciers ou occupants du sol ou les autorités locales sur la surface de la zone d'exploitation;
- Se conformer aux règlements pertinents du territoire et aux législations applicables ainsi qu'aux mesures coutumières locales du lieu d'implantation de son projet;
- Atténuer l'impact de ses activités sur la faune et la flore, les cours et points d'eau;
- Rejoindre la zone d'exploitation artisanale par des routes dont l'impact sur l'environnement est réduit;
- Établir la déclaration de l'exploitant artisanal, déposé à la Division Provinciale des Mines qui lui a délivré la carte d'exploitant artisanal et l'autre est déposé au bureau de l'autorité locale du territoire ou se trouve le site de ses opérations.

Opérations interdites



Le mercure



Travail des enfants



Des explosifs



Forces armées



Impact environnementale



Tunnels profonde

Aménagement des zones d'exploitation artisanale (Art.3)

L'exploitant artisanal est tenu de :

- Ne pas défricher par le feu;
- Réaliser le défrichement et l'aménagement de la zone d'exploitation de façon à ce que les racines des plantes ou arbustes soient conservées;
- Ne pas couper d'arbres qui ne se trouvent pas directement sur le site d'extraction et à les contourner s'ils présentent un obstacle.

L'exploitant artisanal s'engage à réhabiliter chaque portion de la zone d'exploitation artisanale des lors qu'il a cessé d'y travailler et non pas lorsque l'ensemble de ses activités minières est terminé. A cet effet, il est tenu de réaliser ces travaux de réhabilitation suivant l'une ou l'autre des étapes ci-après :

- Restaurer les contours du relief du paysage afin d'éviter les accidents de ce relief et de minimiser l'érosion;
- Aérer la terre aux endroits où elle est trop compacte;
- Remettre l'humus sur la surface des sites ou les opérations ont été achevées.

Du maintien de campement (Art.4, 6, 7, 8)

L'exploitant artisanal est tenu de :

- Ensevelir les ordures produits lors de ses opérations à une profondeur de 1.5 à 2 mètres, tout en veillant à ce que l'ensevelissement n'affecte pas les eaux souterraines et qu'il soit réalisé au moins 100 mètres des cours d'eau;
- Maintenir le campement en ordre et à enlever toute les structures et infrastructures installées par lui lorsque le campement est abandonné;
- Ne pas construire de structures permanentes.

Du gestion de mine (Art.4, 8, 9)

L'exploitant artisanal est tenu de :

- Réaliser les opérations minières bruyantes seulement pendant la journée afin de ne gêner les habitants des localités voisines;
- Ne pas creuser des tunnels et à ne pas réaliser d'excavations plus de 30 mètres de profondeur;
- Maintenir un degré d'inclinaison de 15% et de laisser des bancs horizontaux d'au moins un mètre de largeur tous les 2 mètres de profondeur;
- Rassebler en tas, à une distance minimale de 10 mètres de l'endroit où il creuse, le sol et l'humus extraits de la recouvrir d'une bâche en plastique enfin qu'il soit l'abri du vent et de la pluie
- Limiter les traversées des cours d'eau.



Opérations de plongée (Art.10)

L'exploitant artisanal est tenu de :

- Se munir d'équipements appropriés;
- Se renseigner l'existence d'espèces animales ou végétales dangereuses pour l'être humain;
- Ne pas effectuer des opérations de plongée, de ramassage ou de lavage des pierres précieuses dans les cours d'eau à moins de 500 mètres en amont de tout point de captage.

Signalisation (Art.5, 11)

L'exploitant est tenu de :

- Suspendre les activités en cas de découverte de vestiges historiques dans la zone d'exploitation et d'en aviser immédiatement l'autorité compétente;
- Informer immédiatement les autorités locales de tout accident survenu dans la mine ou de toute maladie ou épidémie;
- Signaler, avec une barrière en bois, l'existence d'une mine. Cette structure devra être présente constamment à l'emplacement de la mine pour empêcher les êtres humains ou les animaux d'y tomber accidentellement.

Formation des exploitants artisanaux (Art.12)

L'exploitant artisanal s'engage à participer au stage de formation en techniques d'exploitation artisanale organisé par les services spécialisés du Ministère des Mines.

Sites Miniers pour l'exploitation minière artisanale

Numero du site	Carte	Titre	Date de creation	Territoire	District	Province
6254			13-Mar-08	Kalele	Sud Kivu	Sud Kivu
6255	S2/28	6255	13-Mar-08	Kalele	Sud Kivu	Sud Kivu
6256	S4/28	6256	13-Mar-08	Mwenga	Sud Kivu	Sud Kivu
6257	S4/28	6257	13-Mar-08	Mwenga	Sud Kivu	Sud Kivu
ZEA-005	S2/ 28 S3/28	O55	22-Sep-09	Kalehe	Sud Kivu	Sud Kivu
ZEA-013			22-Sep-09	Shabunda	Sud Kivu	Sud Kivu
ZEA-014			24-Sep-09	Shabunda	Sud Kivu	Sud Kivu
6249	S1/28	6249	13-Mar-08	Lubero	Nord Kivu	Nord Kivu
6251	S2/27	6251	13-Mar-08	walikale	Nord Kivu	Nord Kivu
6253	S1/28	6253	13-Mar-08	xxxxx	XXXXX	XXXXX
6692	S1/28	6692	13-Mar-08	Lubero	Nord Kivu	Nord Kivu
6693	S1/28	6694	13-Mar-08	Lubero	Nord Kivu	Nord Kivu
6716	S1/28	6693	13-Mar-08	walikale	Nord Kivu	Nord Kivu
6294	S2/28	6716	13-Mar-08	Lubero	Nord Kivu	Nord Kivu
6250	S5/27	6250	13-Mar-08	Kabambare	Maniema	Maniema
5239	S5/27	5239	13-Mar-08	Kabambare	Maniema	Maniema
5240	S5/27	5240	13-Mar-08	Kabambare	Maniema	Maniema
5241	S5/27	5241	13-Mar-08	Kabambare	Maniema	Maniema
5242	S5/26	5242	13-Mar-08	kibombo	Maniema	Maniema
9094	S7/20	9094	13-Mar-08	Tshikapa	Kasaï	Kasaï Occidental
9095	S7/20	9095	13-Mar-08	Tshikapa	Kasaï	Kasaï Occidental
9096	S8/17	9096	13-Mar-08	Tshikapa	Kasaï	Kasaï Occidental
9097	S7/21	9097	13-Mar-08	Tshikapa	Kasaï	Kasaï Occidental
9098			13-Mar-08	Tshikapa	Kasaï	Kasaï Occidental
5245	N5/19	5245	13-Mar-08	Bosobolo	Nord Ubangi	Equateur
5246	N4/22	5246	13-Mar-08	Mobayi Mbongo	Nord Ubangi	Equateur
5247	N4/18	5247	13-Mar-08	Libenge	Sud Ubangi	Equateur
5248	N4/18	5248	13-Mar-08	Libenge	Sud Ubangi	Equateur
5253	N4/21	5253	13-Mar-08	Mobayi Mbongo	Nord Ubangi	Equateur
5254	N4/21	5254	13-Mar-08	Mobayi Mbongo	Nord Ubangi	Equateur
6244	N4/19	6244	13-Mar-08	Bosobolo	Nord Ubangi	Equateur
6245	N4/19	6245	13-Mar-08	Bosobolo	Nord Ubangi	Equateur
6252	N4/19	6252	13-Mar-08	Bosobolo	Nord Ubangi	Equateur
ZEA-020			22-Sep-09	Mobayi Mbongo	Nord Ubangi	Equateur
ZEA-021			22-Sep-09	Mobayi Mbongo	Nord Ubangi	Equateur
ZEA-023			22-Sep-09	Businga	Nord Ubangi	Equateur

5244	N0/24	5244	13-Mar-08	Isangi	Tshopo	Province Ori- ental
6703	N3/23	6703	31-Jul-08	Bondo	Bas-Uélé	Province Ori- ental
6704	N3/23	6704	31-Jul-08	Bondo	Bas-Uélé	Province Ori- ental
ZEA-022			13-Mar-08	Malemba Nkulu	Haut Lomami	Katanga
9093	S7/20	9093	13-Mar-08			Katanga
9092	S8/20	9092	13-Mar-08			Katanga
9092			13-Mar-08	Tshikapa	Kasaï	Kasaï Occidental
6246	S5/27	6246	13-Mar-08	Kabambare	Maniema	Maniema
6246			13-Mar-08	Kabambare	Maniema	Maniema
5251	S5/27	5251	13-Mar-08			Maniema
5250	S5/27	5250	13-Mar-08			Maniema
5250			13-Mar-08	Kabambare	Maniema	Maniema
5243			13-Mar-08	Kasongo	Maniema	Maniema
ZEA-024			22-Sep-09	Malemba Nkulu	Haut Lomami	Katanga
ZEA-025			22-Sep-09	Malemba Nkulu	Haut Lomami	Katanga
ZEA-026			22-Sep-09	Malemba Nkulu	Haut Lomami	Katanga
ZEA-027			22-Sep-09	Manono	Tanganyka	Katanga
ZEA-028			22-Sep-09	Pweto	Haut Katanga	Katanga
ZEA-029			22-Sep-09	Pweto	Haut Katanga	Katanga
ZEA-030			22-Sep-09	Pweto	Haut Katanga	Katanga
ZEA-031			22-Sep-09	Manono	Tanganyka	Katanga
ZEA-076	S11/25	ZEA-076	22-Sep-09	Lubudi	Kolwezi	Katanga
ZEA-077	S11/25	ZEA-077	22-Sep-09	Mutshatsha	Kolwezi	Katanga
ZEA-078	S11/25	ZEA-078	22-Sep-09	Mutshatsha	Kolwezi	Katanga
ZEA-079	S11/25	ZEA-079	22-Sep-09	Mutshatsha	Kolwezi	Katanga
ZEA-080	S11/25	ZEA-080	22-Sep-09	Mutshatsha	Kolwezi	Katanga
ZEA-081	S11/25	ZEA-081	22-Sep-09	Mutshatsha	Kolwezi	Katanga
6718	N3/23	6718	31-Jul-08	Bondo	Bas Uélé	Orientale
6771	N0/25	6771	31-Jul-08	Tshoipo	Kisangani	Orientale
6772			31-Jul-08	Banalia	Tshopo	Orientale
6773	N0/25	6773	31-Jul-08	Banalia	Tshopo	Orientale
6774	N0/25	6774	31-Jul-08	Banalia	Tshopo	Orientale
9701	N0/29	9701	31-Jul-08	Mambassa	Ituri	Orientale

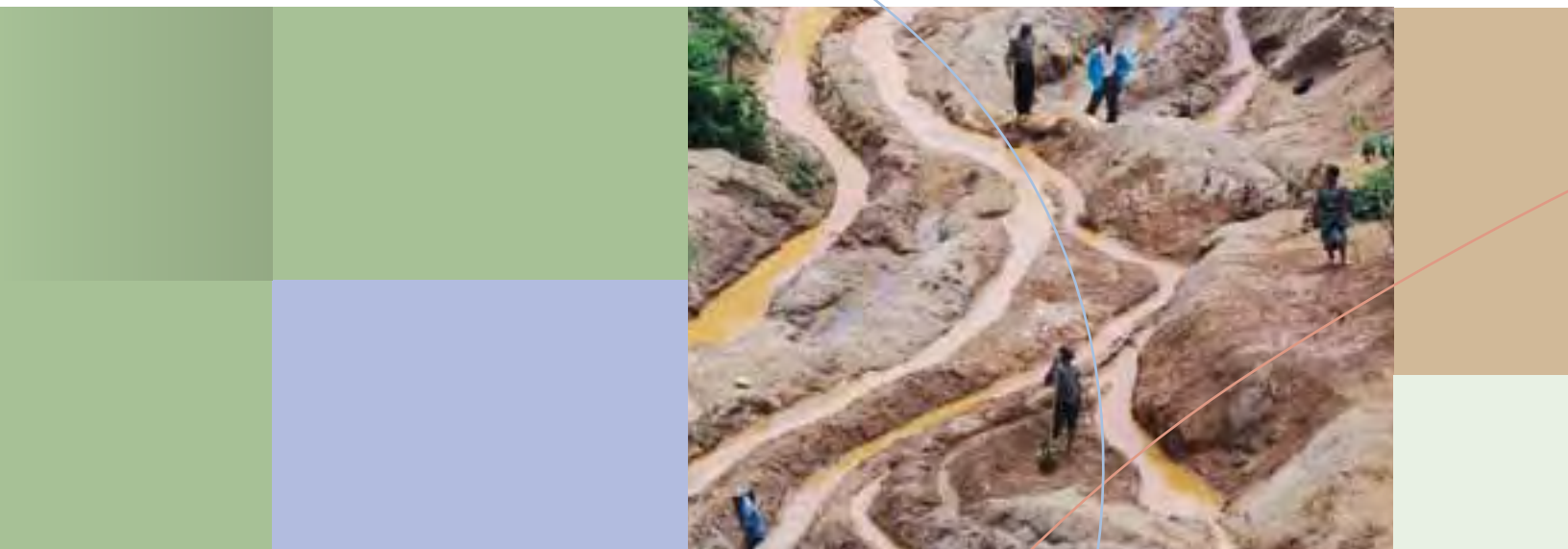
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