



USAID
FROM THE AMERICAN PEOPLE

CAPACITY BUILDING FOR A RESPONSIBLE MINERALS TRADE (CBRMT)

A RIGHTS-BASED APPROACH TO LEGAL AND POLICY REFORM IN THE DRC MINING SECTOR: FINDINGS FROM SCOPING TRIPS AND ROUNDTABLE DISCUSSIONS



APRIL 2014

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech.

Prepared by Tetra Tech for the United States Agency for International Development, USAID Contract No. AID-OAA-I-12-00032/AID-660-TO-14-00002, under the Strengthening Tenure and Resource Rights (STARR) Indefinite Quantity Contract (IQC).

This report was prepared by: Jennifer Graham

Tetra Tech
159 Bank Street, Suite 300
Burlington, Vermont 05401 USA
Telephone: (802) 495-0282
Fax: (802) 658-4247
Email: international.development@tetrattech.com

Tetra Tech Contacts:

Dr. Denis Roumestan, Chief of Party
Email: denis.roumestan@tetrattech.com

Dr. Catherine Picard, Senior Technical Advisor/Manager
Email: catherine.picard@tetrattech.com

COVER PHOTO: Jennifer Graham

CAPACITY BUILDING FOR A RESPONSIBLE MINERALS TRADE (CBRMT)

A RIGHTS-BASED APPROACH TO LEGAL AND
POLICY REFORM IN THE DRC MINING SECTOR:
FINDINGS FROM SCOPING TRIPS AND
ROUNDTABLE DISCUSSIONS

APRIL 2015

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS.....	III
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION.....	2
1.1 INTRODUCTION.....	2
1.1.1 The CBRMT Approach.....	2
1.1.2 Scoping Exercise Objectives.....	2
2.1.3 3Ts Mining in Eastern DRC.....	4
2.0 NORTH KIVU	6
2.1 CONTEXT.....	6
2.1.1 Mining in Masisi Territory, North Kivu Province	6
2.2 RESEARCH APPROACH	9
2.2.1 Overview of Research Methods	9
2.3 FINDINGS.....	11
2.3.2 Implementing Traceability and Due Diligence Systems at Scale.....	17
2.3.3 Customary and Statutory Tenure Arrangements	18
2.3.4 Specific Roles, Contributions, Impacts, and Constraints that Men, Women, and Youth Experience in the ASM Sector.....	19
3.0 SOUTH KIVU	20
3.1 CONTEXT.....	20
3.1.1 Numbi.....	20
3.1.2 Nyabibwe.....	22
3.1.3 Walungu	23
3.2 RESEARCH APPROACH.....	24
3.2.1 Overview of Research Methods	24
3.3 FINDINGS.....	26
3.3.1 Increase the Scale and Quality of Conflict-Free Mineral Supplies.....	26
3.3.2 Implementing Traceability and Due Diligence Systems at Scale.....	29
3.3.3 Customary and Statutory Tenure Arrangements	36
3.3.4 Specific Roles, Contributions, Impacts, and Constraints that Men, Women, and Youth Experience in the ASM Sector.....	37
4.0 IMPLICATIONS	38
4.1 SCALING UP	38
4.2 IMPROVING EXISTING SYSTEMS	39
4.2.1 Credibility.....	39
4.2.2 Efficacy.....	40
4.2.3 Transparency	41
4.2.4 Sustainability	42
4.3 LAND TENURE AND ACCESS RIGHTS	42
4.3.1 North Kivu.....	42
4.3.2 South Kivu	43
4.4 GENDER AND YOUTH.....	43
4.4.1 Roles and Contributions.....	43
4.4.2 Impacts and Constraints	43
5.0 RECOMMENDATIONS	45
5.1 SCALING UP	45
5.2 IMPROVING EXISTING SYSTEMS	46

5.3 LAND TENURE AND ACCESS RIGHTS	46
5.4 GENDER AND YOUTH.....	47
APPENDIX A: RESEARCH QUESTIONS.....	49
APPENDIX B: REFERENCES	53

ACRONYMS AND ABBREVIATIONS

3Ts	Tin, Tantalum, and Tungsten
ARM	Alliance for Responsible Mining
ASM	Artisanal and Small-Scale Mining
ASSODIP	<i>Association pour le Développement des Initiatives Paysannes</i>
BEPAT	<i>Bureau d'Études des Projets et d'Application Technique</i>
BEST	<i>Bureau d'Études Scientifiques et Technique</i>
BGR	<i>Bundesanstalt für Geowissenschaften und Rohstoffe</i> (Federal Institute for Geosciences and Natural Resources)
BSP	Better Sourcing Programme
CAMI	<i>Cadastre Minier de la RD Congo</i> (Mining Registry Office of the Democratic Republic of Congo)
CBMRT	Capacity Building for a Responsible Minerals Trade
CDMC	<i>Coopérative Artisanaux Miniers du Congo</i> (Congo Artisanal Mining Cooperative)
CdN	<i>Centre de Negoce</i>
CEEC	<i>Centre d'Expertise, Evaluation, et Certification</i> (Centre for Evaluation, Expertise and Certification of Precious and Semi-Precious Minerals)
CENADEP	<i>Centre National d'Appui au Développement et à la Participation Populaire</i>
CLS	<i>Comité Local de Suivi</i> (Local Monitoring Committee)
COMALU	<i>Coopérative Minière et agricole de Luntukulu</i>
COMBECKA	<i>Coopérative minière pour le Bien-être des Communautés de Kalehe</i>
COOMIANGWE	<i>Coopérative Minière et Agricole de Ngweshe</i>
COMICA	<i>Coopérative Minière des Creuseurs Affectés</i> (Namoya, Maniema Province)
COMIDEA	<i>Coopérative minière et développement agricole</i>
COMIKA	<i>Coopérative Minière de Kalimbi</i>
COOPERAMMA	<i>Coopérative des Exploitants Artisanaux Miniers de Masisi</i>
CPS	<i>Comités Provinciaux de Suivi</i> (Provincial Steering Committee)

CSAC	<i>Comité de Surveillance et Anti-Corruption</i>
CSO	Civil Society Organization
CTC	Certified Trading Chains
DEAGRI	<i>La Direction de Production Agricole, Pêche, Élevage, Eau, Forêt et Ressources Naturelles</i>
DFID	Department for International Development
DRC	Democratic Republic of the Congo
FARDC	<i>Forces Armées de la République Démocratique du Congo</i> (Congoese National Army)
GDRC	Government of the Democratic Republic of the Congo
GIZ	German International Cooperation
ICGLR	<i>Conférence Internationale sur la Région des Grands Lacs</i> (International Conference of the Great Lakes Region)
IOM	International Organization for Migration
IPIS	International Peace Information Service
IQC	Indefinite Quantity Contract
ITOA	<i>Initiative de Traçabilité de l'Or d'exploitation Artisanale</i> (Traceability Initiative for Artisanal Gold)
ITRI	International Tin Research Institute
iTSCi	International Tin Supply Chain Initiative
JMAC	Joint Mission Analysis Centre
KYC	Know Your Customer/Know Your Client
LSM	Large-Scale Mining
LTPR	Land Tenure and Property Rights
MECAM	<i>Mutuelle d'etracte des Creuseurs Artisaneux de Masisi</i>
MHI	Mwangachuchu Hizi International
MoM	Ministry of Mines
MONUSCO	<i>Mission de l'Organisation des Nation Unies pour la Stabilisation en RD Congo</i> (United Nations Stabilisation Mission in the DRC)
MOU	Memorandum of Understanding
NGO	Non-Governmental Organizations
OBC	<i>Organisations de Base Communautaire</i>
OECD	Organization for Economic Co-operation and Development
PA	Protected Area

PAC	Partnership Africa Canada
PAMP/MKS	<i>Produits Artistiques Métaux Précieux</i>
PE	<i>Permis d'Exploitation</i> (Exploitation Permit)
PR	<i>Permis de Recherche</i> (Research Permit)
PROMINES	World Bank's Growth with Governance in the Mining Sector Program
RAP	Resettlement Action Plan
RCM	Regional Certification Mechanism
SAESSCAM	<i>Service d'Assistance et d'Encadrement du Small-Scale Mining</i> (Small-Scale Mining Technical Assistance and Training Service)
SAKIMA	<i>Société Aurifère du Kivu et du Maniema, SARL</i>
SMB	Société Minière de Bisunzu (formerly MHI)
SOKIMO	<i>Société minière de Kilomoto</i>
STAREC	<i>Stabilization and Reconstruction Plan for Eastern Democratic Republic of the Congo</i>
STARR	Strengthening Tenure and Resource Rights
UN	United Nations
USAID	United States Agency for International Development
USG	United States Government
ZEA	<i>Zone d'Exploitation Artisanale</i> (Artisanal Exploitation Area)

EXECUTIVE SUMMARY

The Capacity Building for a Responsible Minerals Trade (CBRMT) Project coordinated a series of scoping missions in eastern Democratic Republic of Congo (DRC) between December 2014 and January 2015. Undertaken by a collaborative team of project, government, and civil society actors from North and South Kivu, the scoping missions were designed to examine “on the ground” realities, opportunities and constraints associated with due diligence and traceability schemes, and the formalization of the artisanal and small-scale mining (ASM) sector. Findings are drawn from key informant interviews, roundtables, and focus group discussions undertaken during the scoping exercises, as well as a literature review. Our findings also include insights gleaned from discussions among the Scoping Mission team members and observations about what they gained from the scoping trips. The implications of these research findings are analyzed utilizing the Minerals Overlay of USAID’s Land Tenure and Property Rights (LTPR) Assessment Framework. Recommendations center on opportunities to scale up traceability schemes, improve existing systems, strengthen tenure security, and address considerations related to mine site safety and gender.

The constraints identified during the scoping exercises broadly reflect those described in the LTPR assessment framework, namely: resource conflict and displacement, weak governance, insecure tenure and property rights, inequitable access to land and natural resources, poorly performing [minerals] markets, and unsustainable natural resources management. Similarly, the suggested interventions mirror those categorized in the LTPR framework: strengthening institutions and governance; enhancing legal and regulatory framework; increasing rights awareness and empowerment; addressing sources of conflict and supporting dispute resolution; addressing restitution, redistribution, and consolidation; clarifying rights delivery and administration; and improving resource use management.

Recommendations for scaling up traceability schemes include: prioritize the validation of sites in close proximity to existing validated sites; introduction of new/alternative traceability systems; and integration of geologic and mine safety assessments into the validation process. The report suggests improving existing traceability systems through: fraud reduction measures; re-orientation of the role of cooperatives; introduction of a SMS-based information sharing system; and enhanced compliance with legal tax and fee structures. In terms of tenure and access rights, the report outlines opportunities to strengthen existing ASM informal governance systems; to address an impasse between a large scale mining company and artisanal miners in South Kivu; to support a dialogue between customary leaders and cooperatives in South Kivu; and to advocate for the expansion of zoned artisanal mining areas. To better take into account the roles, contributions and constraints facing men, women, boys and girls in the sector, a series of measures are outlined aimed at improving mining safety, augmenting the role of civil society, increasing compliance with labor laws, and increasing awareness of the role of women in mining.

Section 1.0 introduces the CBRMT Project and provides a brief history of artisanal mining of the “3Ts” (tin, tantalum, and tungsten) and gold in the eastern Democratic Republic of Congo. Sections 2.0 and 3.0 share findings from North and South Kivu scoping missions. The implications of these findings are discussed in Section 4.0 and recommendations are enumerated in Section 5.0. The questionnaire used to guide the scoping trips is included as Appendix A.

Findings and recommendations from the scoping exercises will be further examined in the forthcoming Report on a Rights-Based Approach to Legal and Policy Reform in the DRC Mining Sector. The report will identify gaps and priority areas for reform in support of a legal, formalized, responsible, and economically productive small-scale and artisanal mining sector.

1.0 INTRODUCTION

1.1 INTRODUCTION

The Capacity Building for a Responsible Minerals Trade (CBRMT) Project, under Contract No AID-OAA-I-12-00032/AID-660-TO-14-00002, is implemented by Tetra Tech under the Strengthening Tenure and Resource Rights (STARR) Indefinite Quantity Contract (IQC) and under the auspices of the United States Agency for International Development (USAID) Land Tenure and Property Rights (LTPR) Division.

1.1.1 THE CBRMT APPROACH

The CBRMT Project goal is to strengthen the capacity of the DRC and regional institutions to regulate and control transparently a critical mass of the trade in strategic minerals in eastern DRC in order to transform the region’s mineral wealth into economic growth and development.

CBRMT’s technical approach aims to address specific unmet needs in regard to the legal clarification of sub-surface mineral rights (particularly between artisanal and industrial mining actors); stakeholders’ technical capacity to conduct certification and traceability; and the current gap between validated and certified tin, tantalum, and tungsten (the “3Ts”) mine sites. CBRMT will achieve a critical mass of conflict-free minerals by formalizing and channeling the mineral trade through legal mechanisms where resource rights of all legitimate actors are strengthened.

Tetra Tech’s rights-based approach is a guiding principle of CBRMT as the clarification of surface and sub-surface rights to minerals are deeply linked to strengthening the legal chain of custody, and ending the ambiguous or open-access tenure arrangements needed for issuing licenses and formalizing mining claims. Clear, secure, and enforceable LTPR systems are also fundamental to a wide variety of development outcomes, including economic growth, peace and security, good governance, and sustainable natural resource management.

1.1.2 SCOPING EXERCISE OBJECTIVES

The findings and recommendations stemming from a series of field-based scoping exercises and roundtable discussions held in North and South Kivu are outlined in this report. A team composed of Congolese government officials, Congolese non-governmental organization (NGO) personnel, Tetra Tech staff, and international consultants conducted the scoping missions. The scoping was designed to facilitate active participation by government officials in fieldwork, to collect data and then reflect upon information and observations during team debrief sessions. The participatory nature of the scoping exercises allowed stakeholders to examine and “ground-truth” opportunities and constraints faced by upstream stakeholders in implementing due diligence and traceability schemes, as well as the challenges associated with the

CBRMT Theory of Change

If CBRMT can implement specific legal and policy reforms; strengthen the capacity of key actors in the mineral supply chain; scale up improved and alternative systems for artisanal and small-scale conflict-free supply chains; and build regional capacities to certify, monitor, and audit supply chains through the region credibly—then artisanal miners will have higher incomes, the GDRC will have increased mining revenues, the revenue from illicit mining for actors who finance and support armed conflict will decline, and there will be a greater quantity of conflict-free mineral exports.

formalization of the Artisanal and Small-Scale Mining (ASM) sector from a resource rights perspective. In addition, members of the scoping mission learned new forms of group work and facilitation, which they intend to use in future workshops and meetings within their own institutions.

Four thematic profiles were emphasized during the scoping exercises:

1. *Scaling Up*: Opportunities, constraints, and capacity to scale up validation, traceability, and due diligence in support of conflict-free mineral supply chains, including both 3Ts and gold;
2. *Improving Existing Systems*: Opportunities and constraints related to the efficacy, cost, transparency, credibility, and sustainability of implementing traceability and due diligence systems at scale for the 3Ts.
3. *Land Tenure and Access Rights*: Customary and statutory tenure arrangements that govern access, use, and management (enforcement) of land and minerals.
4. *Gender and Youth*: Specific roles, contributions, impacts, and constraints that men, women, and youth experience in the ASM sector.

The analysis and recommendations sections of the report have been organized under these thematic profiles.

USAID has developed a suite of tools and methodologies designed to enhance the understanding and programming of LTPR challenges and activities to advance United States Government (USG) Development Objectives in a number of areas. These tools include the Land Tenure and Property Rights (LTPR) matrix, which was developed as a methodology for determining USAID-recommended interventions for different asset and social classes (e.g., men and women) and identifying constraints and opportunities (USAID, 2013).

The LTPR matrix has several “overlays” relating to specific kinds of resources, including minerals. During the design and operationalization of the scoping mission, as well as during the analysis of the results, the USAID LTPR matrix was utilized as a tool for inquiry, organizing concepts, and processing information. The constraints identified in this report broadly reflect those identified in the matrix, namely resource conflict and displacement, weak governance, insecure tenure and property rights, inequitable access to land and natural resources, poorly performing [minerals] markets, and unsustainable natural resources management and biodiversity loss. Similarly, the suggested interventions mirror those categorized in the matrix: institutions and governance; legal and regulatory framework; rights awareness and empowerment; conflict and dispute resolution; restitution, redistribution, and consolidation; rights delivery and administration; and resource use management. The various categories of constraints and potential interventions listed in the LTPR matrix are interspersed as appropriate throughout this report.

The scoping approach yielded several benefits, yet also faced some challenges. Team members cited their inclusion in the formulation of research questions, the identification of stakeholders, the execution of the research and the subsequent analysis as strengths of the approach. They also valued the opportunity to work alongside researchers from other organizations, as it provided insights into issues from a variety of perspectives. The unique participatory design of the scoping missions added a sense of “ownership” among participants regarding the mission findings, as many of the recommendations were generated by the Congolese team members themselves.

The approach also proved challenging in several respects. In terms of logistics, this type of trip required significant investment of time and resources to ensure that transport, lodging and materials were all adequately covered. It was also difficult to judge how much advance notice to provide organizations in the research areas about the scope of the mission. On the one hand, the team wanted to be sure to be able to meet with stakeholders. On the other hand, the team wanted accurate data from a cross-section of

individuals and not hand-selected interviewees who might represent one point of view. The multitude of languages spoken in locations such as Rubaya proved difficult at times, as not every sub-team included someone who spoke the range of local languages. Finally, the volumes of handwritten notes proved cumbersome to analyze. To some extent, the qualitative, collaborative nature of the research design was bound to generate pages and pages of notes, however, it would have been helpful to have a streamlined note-taking strategy.

The policy recommendations that emerged from the scoping exercises will be further examined in the forthcoming *Report on a Rights Based Approach to Legal and Policy Reform in the DRC Mining Sector*. The report will identify gaps and priority areas for reform in support of a legal, formalized, responsible, and economically productive small-scale and artisanal mining sector. Recommendations will focus on practical reforms to scale up mine site validation, traceability, and certification systems; and identify constraints and interventions to strengthen tenure clarity and security within DRC mining law, policy, and regulations. The Report will be presented to key stakeholders for feedback and validation at a two-day national conference in June 2015 in Kinshasa, DRC.

2.1.3 3TS MINING IN EASTERN DRC

The “3Ts” are tin (cassiterite), tungsten (wolframite), and tantalum (columbite–tantalite or “coltan”). They have been mined in the DRC since the early 20th Century, at first by Belgian mining firms, and later by artisanal miners, after the collapse of the formal mineral sector in DRC in the mid-1980s (International Peace Information Service [IPIS], 2012a). It is estimated that today there are approximately 400,000 artisanal miners in North and South Kivu alone, although it is difficult to be sure due to inconsistent registration (Triest, 2013). The 2002 Mining Code Loi N° 007/2002 stipulates that that artisanal exploitation is only permitted in specially designated artisanal mining zones, or Zones d’Exploitation Artisanale (ZEA)¹. There are currently only 82 ZEAs throughout the country for all minerals combined, although almost all artisanal mining occurs outside of these areas. Most artisanal mining takes place on industrial concessions in areas where there are overlapping and often conflicting property rights (IPIS, 2012a). For example, no ZEAs have been created in the entire territory of Walungu, an area of intense artisanal production (Geenen and Radley, 2014). ZEAs have very little security of tenure, as the government can close such a zone within 60 days if it deems industrial mining viable. Most ZEAs are located in remote areas and have limited production capacity, although it is difficult to estimate the potential mineral concentrations as no geological studies have been undertaken to determine mineral reserves for these zones (Geenen and Radley, 2014).

Key Terms

- **Centres de Negoce:** Trading Centers
- **Comptoirs:** Buyers
- **Creuseurs:** Artisanal miners
- **Fonderies:** Smelters
- **Mwami:** A customary chief who holds authority over a large area.
- **Negociants:** Middle men who buy and sell minerals. Often also members of cooperatives.

Moreover, they cover only 219 km², which is a small area compared to the large concessions owned by industrial mining corporations (e.g., Banro’s exploitation permits covering more than 2,790 km², according to Geenen and Radley, 2014). It is estimated that more than 500,000 miners may currently be working in the mines of the eastern DRC alone. The extraction and smuggling of minerals (particularly the 3Ts and gold) became heavily controlled by foreign and Congolese armed groups during and following the First and Second Congo wars (1996 onwards). In recent years, the state has attempted to reduce smuggling and generally expand its control over the artisanal mineral sector, with mixed results. Positive gains have been

¹ Ministry of Mines, RDC (2010). <http://www.prominesrdc.cd/fr/arretes/ARRETE0078.pdf>

made, with a decline in armed groups profiting from 3Ts, but growing use of gold to finance illicit activities (Group of Experts, 2015). In many areas, armed groups (including elements of the *Forces Armées de la République Démocratique du Congo* [FARDC]) continue to apply a wide variety of methods to profit from the DRC's natural resources, for example: exerting direct control over a mining site; illegal taxation along trade routes and at road blocks; demanding entrance fees to miners; forced labor; regular pillaging of mining sites; trading (using intermediaries); and mineral smuggling.

Land, and by extension the subsoil mineral resources, are frequently contested by different individuals, companies, and ethnic groups. In North Kivu, for example, the nationality law of 1972 and 1973 land law worked to the advantage of migrants of Rwandan descent. This citizenship law gave the “Banyarwanda” (Hutu and Tutsi) the rights to vote and acquire land. As an ethnic minority without customary chiefs controlling territory, they had previously lacked any means of owning land. Although the Kinyarwanda-speaking leadership later fell out of favor with Mobutu, they had by that time managed to gain control over large swathes of land in North Kivu. Some of these landholdings were expanded in the late 1990s when the RCD-Goma controlled the area, and possibly again during the period of M-23 control (particularly in neighboring Rutshuru).

Aside from the links to conflict and associated socio-political and ethnic tensions, the field research and literature review identified numerous challenges in the mining sector in eastern DRC, including: poor state of infrastructure (e.g., road conditions); high levels of corruption throughout the business chain; a general weak adherence to the rule of law, so that accountability is nearly absent; state mining services characterized by underqualified and underpaid staff, duplication of tasks, and overlapping roles; and limited information sharing and collaboration between various actors. Informal mineral extraction is generally highly organized, part of a complex network, and is “taxed” (illegally) in systematic ways; meanwhile, the “formal” sector can be entrenched in illegal, shadow networks of smuggling and fraud.

The next two chapters will delve into further detail about the particular context, challenges and opportunities of artisanal mining sites in North Kivu and South Kivu via case studies in Rubaya, Numbi, Nyabibwe and Walungu.

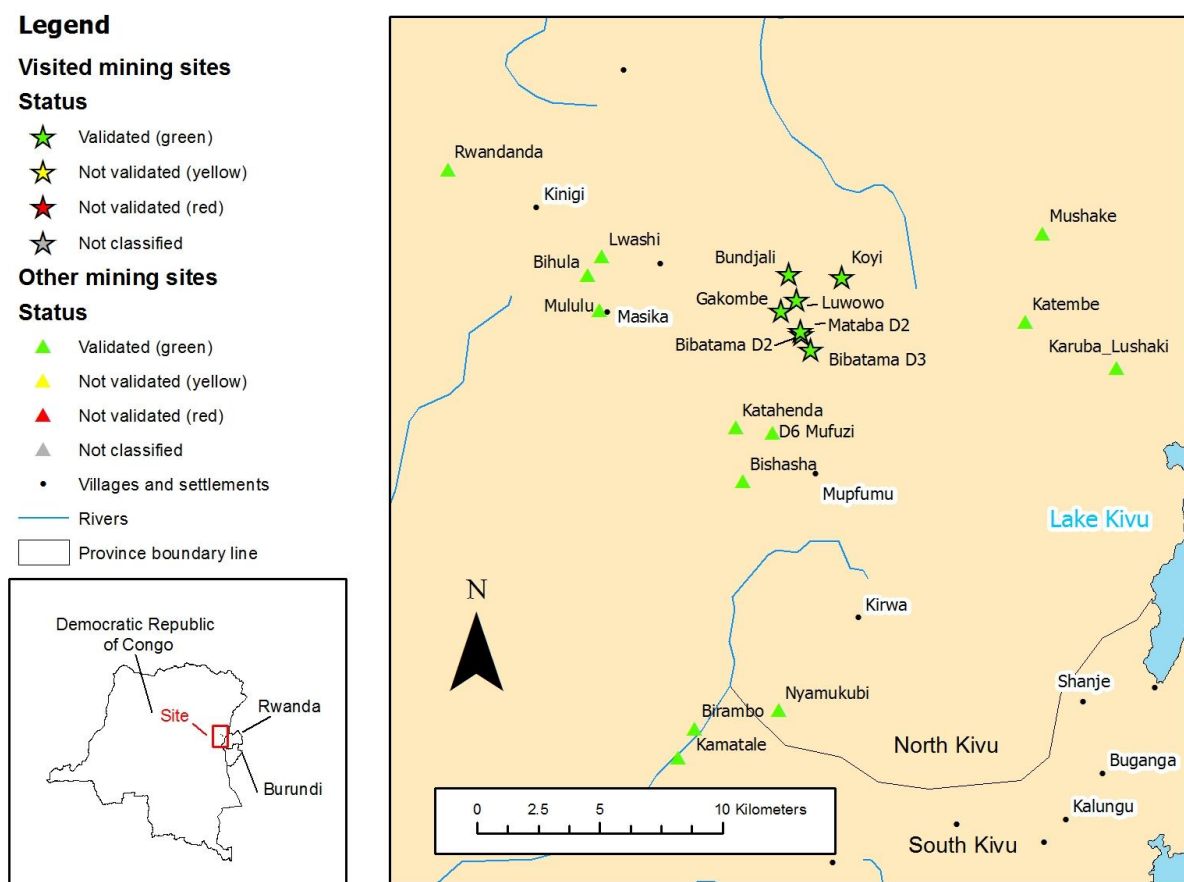
2.0 NORTH KIVU

2.1 CONTEXT

2.1.1 MINING IN MASISI TERRITORY, NORTH KIVU PROVINCE

Masisi Territory has at least 21 3Ts mines (17 of which are validated as green), and is characterized by fertile soils and plentiful rains; land is therefore valued not only for mining but also ranching and farming. It is a densely populated area which includes over 270,000 displaced persons (UN OCHA, 2015). Due to its natural resource abundance, its geographical proximity to Rutshuru Territory (which borders Rwanda and has been the epicenter of recent rebellions, including the M-23 rebellion), and the demographic and economic dominance of Hutu and Tutsi populations, Masisi has been frequently and severely affected by conflict since 1994.

FIGURE 2.1: MASISI MINING SITES



During the war in the late 1990s, up to one-third of the adult population of Masisi (North Kivu) worked in the mines, partly because their agricultural land had become inaccessible (Vlassenroot, 2004). Land, as well as other sources of power and wealth, have been contested by “Banyarwanda” and the Hunde and other ethnic groups that style themselves as “autochtone” (e.g., indigenous Congolese, as opposed to the

supposedly “immigrant” Banyarwanda). Longstanding tensions and conflicts over land and political authority have taken on ethnic dimensions. Tensions and conflicts between Hutu and Tutsi, and between other communities, have been interspersed with episodes of strategic cooperation and coordination in political, economic, and military spheres. In regions such as Masisi, faced with rapid population growth, competition for land since the 1970s has put the resources of poor peasant households under growing pressure, to the extent that large parts of the peasant population have been faced with complete impoverishment. Three effects can be traced:

- The shift in the economic use of the available space resulted in land dispossession and alienation, producing a large agricultural labor surplus.
- As mostly young men opted for a strategy of temporal migration, local mobility patterns shifted.
- Intensified competition for wealth accumulation through land, led to a hardening of social boundaries on an ethnic basis.
- An increased percentage of the population turned to ASM (even if only on an itinerant basis) for cash.

In most parts of northeastern DRC, the years following the signing of the 1999 Lusaka Ceasefire Agreement were characterized by a process of fission of armed groups and their political counterparts. For example, the RCD split into three main factions in September 1999, partly due to competition between their foreign backers (Uganda and Rwanda) and partly due to the different demands made by political/military leaders during the peace process. For their part, the Congolese government, before the establishment of the Transitional Government, supported ex-FAR and *Interahamwe* groups as well as many of the numerous Mayi-Mayi (or Mai-Mai) forces. These groups were, alongside rebels and their backers, responsible for widespread banditry and human rights abuses against civilians, drawing on monies from minerals for weapons and material support. Most groups recruit along ethnic lines. Major commercial landowners, mining concession owners, and Congolese politicians have also been accused of providing support to various armed groups.

In recent years, various new militia groups have formed in Masisi, including the “Nyatura” and Mai-Mai Raia Mutomboki. The security situation is very fluid and the *Mission de l’Organisation des Nations Unies pour la Stabilisation en RD Congo* (United Nations Stabilisation Mission in the DRC [MONUSCO]) and the FARDC have been unable to provide consistent security to civilian populations due to the guerilla nature of the militia groups, the rugged topography and lack of road access to many areas, and the sheer extent of security challenges across other parts of Eastern DRC.

This has meant that armed groups have been able to maintain some level of control over particular mining areas, establishing roadblocks and levelling illegal “taxes.” Their presence has meant that some mines cannot be validated for inclusion in the International Tin Supply Chain Initiative (iTSCi) process. Under DRC law, a mining site is first visited and inspected by a multi-stakeholder validation team (*équipe conjointe*) comprising of one representative from the organizations in the box to the right.

Validation Team Composition

- Provincial Ministry of Mines
- Provincial SAEASCAM
- Provincial Mining Cadaster
- Provincial Mining Police or regional military representative
- International certifying body (e.g., BGR)
- International traceability organization (e.g., ITRI)
- Provincial level MONUSCO
- Chambre of Mines
- Civil Society organization in natural resources sector

Source: Ministry of Mines, *Arrete Ministerial 58 (2012)*

During their site visits, the validation team uses a short, simple standard checklist of criteria to assess whether the mining site meets minimum standards (e.g., production and sale are not linked to armed actors, neither pregnant women nor children are directly involved in minerals production, and rudimentary health and safety measures are in place). Sites are then recommended to be categorized as ‘green,’ ‘yellow,’ or ‘red.’ A site that meets these all the criteria is “validated” as green, and is eligible for the implementation of a traceability system (such as iTSCi or GeoTraceability) by governmental *Service d’Assistance et d’Encadrement du Small Scale Mining* (Service for Assistance and Support to Small Scale Mining [SAESCAMM]). To be in compliance with the ICGLR Regional Certification Mechanism and DRC law (Arrete Ministeriel 058²), the sites should be visited every year to ensure that the criteria for validation are still being fulfilled, and monitoring systems are put in place to collect information on the various criteria (OECD, 2013). Under the iTSCi system, a green site is valid for six months (Hayes, 2010).

There were 10 mining cooperatives registered in North Kivu Province in 2014; several others had their files under consideration for registration. However, Division of Mines officials lamented a lack of “cooperative spirit” among the miners, with many organizations best described as “pseudo-cooperatives,” with the President residing outside of the Province and many members not actually miners but rather *negociants*.³ The *Coopérative des Exploitants Artisanaux Miniers de Masisi* (COOPERAMMA) is the biggest cooperative in North Kivu with an estimated 2,500 members.

In late 2013, COOPERAMMA signed a production agreement with the owner of several coltan mines, a company called Mwangachuchu Hizi International (MHI), which has since changed its name to *Société Minière de Bisunzu* (SMB). SMB plays a dual role as a concession-owner (i.e., it has a *Permis d’Exploitation*) and also as a *comptoir*. COOPERAMMA has the responsibility of managing day-to-day mining activities by its members (with the exception of one mine which is mined “industrially” by SMB). Part of the agreement between SMB and COOPERAMMA is that COOPERAMMA (and *negociants* and miners selling coltan from Rubaya) must sell all of the coltan to SMB (which has the *comptoir* side of its business in Goma). Production in these mines is artisanal and managed by COOPERAMMA, with the exception of the Bibatama D3 mine, which is managed entirely by SMB with its own workforce.

There is a *Centre de Negoce* (CdN), or artisanal mining trading center, in Rubaya town, which is one of the biggest towns in the area. The establishment of *Centres de Negoce* is being supported in part by the UN Peacebuilding Fund, USAID and the DRC Ministry of Mines. The intention is to have supervised sites where, “where minerals will be legally traded for export traceable production from identified and qualified non-conflict mine sites” (Priester, 2012). Sales of minerals are meant to occur at the CdN, in order to ensure a secure and transparent environment for minerals sales.

Overview of CTC and iTSCi and in Masisi

In April 2012, a baseline study of MHI mines in Rubaya, Masisi was conducted for the Certified Trading Chains program (CTC) (Priester, 2012). CTC is a voluntary audit-based verification system set up in 2009 by the German Federal Institute for Geosciences and Natural Resources (BGR) to assess progress towards a set of 20 standards that focus on: origin and volumes of minerals, transparency of government payments; child labor and fair working conditions, security and respect of human rights, community consultation on development; gender sensitivity, and environmental performance.

In May 2014, a CTC audit of the SMB mines was conducted on behalf of BGR. The study revealed that in addition to the seven mines greenlit and certified by iTSCi, there are also two “informal” sites, controlled by persons who could not be identified by the auditors. These sites are known locally as

² http://mines-rdc.cd/fr/documents/Arrete_0058_2012.pdf

³ The issues of elite capture, representation of miner’s interests are discussed further in the South Kivu. See 3.32.

Muvumbuku (which is a re-exploitation of rejected material from Bibatama D2) and “Bayo’s Site” at Bibatama D2. The audit also reported that although Bibatama D3 is operated by members of COOPERAMMA, this cooperative does not have formal control over the site. These sites have not been validated. The audit found that despite improvements to the system introduced by SMB and iTSCi (and by COOPERAMMA to some extent), there are still significant risks and problems regarding the health and safety of miners and the traceability system. These will be discussed further below. As a result of these problems, the CTC audit recommended that the SMB sites **not** be included under CTC certification.

Preliminary iTSCi activities were carried out in Masisi in collaboration with other partners in late 2013 and early 2014 (Enough Project, 2014). iTSCi baseline studies were carried out in March 2014 and the certification project was launched shortly afterwards. According to iTSCi, all of the Government validated “green” mine sites in Masisi have been covered by the iTSCi certification system since August 2014 (iTSCi, 2014a). This means that 10 mines were included between March and August, and a total of 27 mines are currently covered by the iTSCi system. iTSCi reports that production has been steady in Masisi since March 2014, but actual production figures are not released by iTSCi (iTSCi, 2014b).

In addition to implementing the certification system through support to various partner organizations such as PACT, iTSCi monitors the security situation in and around the mining and transportation areas, through consultation with UN services such as MONUSCO, the U.N. Office for the Coordination of Humanitarian Affairs (UN-OCHA), and United Nations Department of Safety and Security (UNDSS) as well as iTSCi field staff and other stakeholders.

According to SMB staff, the introduction of the iTSCi system has reduced smuggling of minerals from their sites. This is partly because of changes to the locations of the washing stations, which has reduced the need for extensive transport of the mineralized material around the mining sites. Staff claim that prior to the system, some 50 percent of minerals (or “mineralized sand and soil,” which has not been fully washed and separated) extracted by COOPERAMMA miners was smuggled out of the site without being sold to SMB. Since March 2014, according to the SMB head of traceability, fraud has fallen to about 5 percent. However, these figures should be taken with caution as they are estimates and SMB staff have a vested interest in demonstrating the effectiveness of the current system. The 2015 report by the UN Group of Experts for the DRC notes that 3T smuggling continues in Masisi, although at significantly lower levels, but does not estimate the extent of the practice (Group of Experts, 2015). While much smuggling may be small-scale and committed by individuals rather than institutions, it may be more organized in certain cases. The UN Group of Experts for example stated that Congolese army officers are sometimes involved in the smuggling of minerals from Masisi, often with impunity. (Group of Experts, 2015, p.22)

2.2 RESEARCH APPROACH

2.2.1 OVERVIEW OF RESEARCH METHODS

A team composed of 12 representatives from the following organizations and agencies conducted the Scoping Exercises in North Kivu (Rubaya) from December 8th to 11th, 2014:

- Provincial Division of Mines, Ministerial Cabinet (one representative);
- Division of Mines (one representative);
- SAESSCAM (one representative);
- CEEC (one representative);
- Civil society organizations ([CSOs] two representatives);

- iTSCi (one representative);
- International Organization for Migration (IOM, one representative); and
- CBRMT staff (two consultants and two DRC staff).

During an initial orientation and planning session, the Scoping Mission Team generated a list of individuals and organizations to interview, agreed upon research questions (see Appendix A), discussed research methods, and reviewed logistics for field visits. The Team Leaders held meetings with the leadership of key stakeholder groups to gain permission and support for the field research. This included meetings with three key stakeholders: the Provincial Minister of Mines, North Kivu; the President of COOPERAMMA—the primary active cooperative in the area; and the President of SMB—the private sector concessionaire and *comptoir* in Rubaya.

The Scoping Mission Team traveled to Rubaya in Masisi territory on December 8th, 2014, where they divided into three sub-teams, each with its own CBRMT lead. Each sub-team visited 1-2 mine sites per day (sub-team composition changed each day to maximize cross-fertilization of ideas and exchanges across organizations). While all sub-teams drew upon the same questions (see Table 2.2. for a list of visited sites), each sub-team emphasized slightly different aspects of the research agenda. For instance, one team primarily focused on meeting with those in management and leadership positions within the various stakeholder groups. The second team included several focus groups with civil society organizations working with youth and women. The third team integrated documentation of the steps involved in the traceability system. Table 2.1 illustrates the specific stakeholders consulted by the sub-teams. Daily internal debriefing sessions invited each sub-team to highlight the most salient findings of their research and discuss their implications with the other research teams. These conversations fostered mutual learning among team members, a key objective of the collaborative research approach.

At the conclusion, the Scoping Mission Team reflected on the strengths and challenges of the research approach, expressing appreciation of the multi-disciplinary nature of the team, the participatory approach to developing the research agenda, the representative nature of and access to the stakeholders, and the organization of the research process. Key constraints and lessons learned about the process itself included:

- Leaders of COOPERAMMA and SMB, as well as such state actors as the Mining Police, were visibly present at the mine sites and attempted to be in close proximity to the Scoping Mission Team at all times. Interviewees at mine sites also seemed to be hand selected by COOPERAMMA and SMB. This constrained data collection, however, whenever possible team members sought to have conversations in private.
- The composition of the Scoping Team and the convoy of vehicles and motorbikes raised the visibility of the team, which drew a lot of interest from miners and officials, rendering it difficult to have private, confidential conversations with miners on site. Notably, conversations on sensitive topics mostly took place away from mine sites, in informal settings in the town center.
- The team did not inform CSOs ahead of time, which made it difficult for some CSOs to meet with researchers. It is recommended that subsequent scoping trips attempt to reach out to appropriate groups to invite respondents to participate in interviews.

TABLE 2.1: STAKEHOLDERS CONSULTED

Governmental Officials	Civil Society	Miners (Formal and Informal)
<ul style="list-style-type: none"> • Chef de Poste • SAESSCAM • Administration des mines • Mining Police/Police 	<ul style="list-style-type: none"> • Community-based organizations (e.g., agro-pastoral associations, women’s associations) • Health centers • School staff (principles) 	<ul style="list-style-type: none"> • OBC: <i>cibler des associations minières</i> • <i>Creuseurs</i> (including transporters, those washing minerals, etc.) • <i>Negociants</i> • Businesses indirectly affiliated with mines (e.g., motorbike riders, women-owned businesses) • President of COOPERAMMA • SMB President and staff

The Scoping Mission Team visited 8 artisanal mine sites (see Table 2.2), and interviewed dozens of individuals in Rubaya and surrounding mine sites over the four-day period.

TABLE 2.2: SITES VISITED

Rubaya: 3Ts
<ul style="list-style-type: none"> • D2 Bibatama • D3 Bibatama • MHI Bibatama • Bundjali • Gakombe D4 • Koyi • Luwowo • Mataba

This sample of sites is inclusive of the 3Ts and gold; of validated “green” mine sites, as well as non-certified “red” mine sites; and of the presence and absence of the iTSCi traceability system. Also, the sites include those managed by COOPERAMMA and others, such as D2 Bibatama, which is mined directly by SMB. The sites also differ in their strategy for exploitation. For instance, in Luwowo mine, there has been a shift away from pit-based exploitation towards a more “open cast” model that relies on a plentiful water supply to disperse the non-mineralized soil and facilitate digging. While most of these sites are established and recognized under the Ministry of Mines, as noted earlier, there are two exceptions: Muvumbuku (which is a re-exploitation of rejected material from Bibatama D2) and “Bayo’s Site” at Bibatama D2. The particular challenges with Koyi are discussed on page 14.

During daily debriefing sessions each sub-team collated notes and then shared highlights of their findings with the larger team. During this stage, the scoping team began analyzing the implications of the insights and brainstorming options for addressing the myriad of challenges and for capitalizing on the opportunities. The group consolidated their findings and discussed potential recommendations during a Capstone session in Goma. Findings and preliminary recommendations were shared with the Provincial Minister of Mines, with the President of SMB and with the leadership of COOPERAMMA.

2.3 FINDINGS

Weaknesses in Due Diligence and Traceability Systems

As demonstrated in the visual schematic of the traceability system in Luwowo mine (Figure 2.2), the process of mining, washing, drying, bagging, tagging, and delivering coltan to SMB’s depot in Goma

Figure 2.2: Traceability Schematic



involves some 17 different steps. In interviews, many key actors provided only a simplified version of this process, leaving out many of the problematic stages. Site visits and direct observation of coltan drying areas in Rubaya town allowed the Scoping Mission team to ascertain the complexity of the process. Many of the details have also been documented by the U.N. Group of Experts in their latest report (Group of Experts, 2015).

As can be seen from the visual schematic, the amount of “mineralized material” mined (stage 2 in the schematic) is recorded in a notebook by members of the pit manager’s team (stage 3) as the material is transported in bags from the pit (or open cast area) to the first washing station (stage 4). On arrival at the washing station, the amount of material is again documented in a notebook, which is later compared to the notebook at stage 3 to ensure that the totals are the same, and minerals have not been transported elsewhere. Stages 3 and 4 of the schematic represent the initial components of the traceability system. The material is then washed (stage 5), dried (stage 6), and the coltan “separated” from the sandy soil through the application of a magnet, to increase the concentration of coltan in the material (stage 7).

There is an association of separators in Rubaya that uses magnets (recycled from computer printers) to do the separating.⁴ After the magnetic separation process, there is usually a secondary washing (stage 8) and drying process (stage 9) before the coltan is placed in the proper bags, and tagged (stage 10), which represents another component of the traceability system. Bagging and tagging is generally meant to occur at the mining site, though it sometimes occurs at the homes of individual *negociants*. The tagged bags can then be purchased and independently transported (stage 11) by the pit owners or *negociants* (usually known as “category A” *negociants*, who generally work at a small scale and are permitted to travel to the mining sites) to the CdN in Rubaya town.

Sales of the tagged sacks are supposed to made at the *Centre de Negoce*, though in their absence, this also occurs at the home of *negociants* (stage 12). Having purchased several sacks, the category A *negociants* meet with COOPERAMMA officials and the sacks are opened and combined (stage 13) so that the minerals can be separated using an industrial magnet (stage 14).⁵ The presence of COOPERAMMA at this stage is presumably intended to provide it with data on how many kilograms of coltan are being sold from mines it controls.

The coltan is then bagged and tagged by SAESSCAM (stage 15) and purchased by the category B *negociants*, who work at a large scale and must, under the mining code, remain in towns rather than travelling to the mine sites. The category B *negociants* transport the minerals to the SMB

⁴ According to interviews, separators at this level are not paid for their work but are allowed to keep the mineral residue that they separate from the coltan. In bulk, this has some value.

⁵ A magnet is used twice as a part of the separation process: at the first stage there is a small magnet; at second stage there is a more specialized and powerful magnet. The secondary separation is done by members of the association of separators, for a fee.

depot in Goma (stage 16), where the tags are cut from the 50kg bags under the supervision of SAESSCAM and the coltan is purchased by SMB (stage 17).

What most informants neglect to mention, however, is that there is often insufficient space around the washing stations for all the minerals to be dried and separated. In practice, much of the mineralized material is transported away from the site (for example, at stage 5 of the schematic), without being bagged and tagged, and is then dried at the individual homes of miners, pit managers, or other members of the mining team for each particular pit (see Figures 2.3 and 2.4). The mineral is then separated, washed and dried again before being taken to a central point for bagging and tagging (stage 10).



FIGURES 2.3 AND 2.2: MINERALIZED MATERIAL DRYING OUTSIDE PRIVATE HOUSES

Some stakeholders expressed these were the weakest points in the chain of custody, as the drying and transport of minerals is largely unmonitored. On a related issue, observation and interviews suggest that the mining sites are not very heavily secured at night. None of the mines visited were fenced-off. The smaller mines can be adequately guarded at night (though lighting or other equipment may be needed to improve the level of security); large mines such as Luwowo are very difficult to secure; even using guards, as it is difficult to get a view of the entire site and there is a huge (unfenced) boundary around the site to patrol. Some informants were also of the opinion that the security guards can easily be bribed to allow access to the sites at night.



Particular Weaknesses of Traceability System at Koyi/Nkoy Mining Site

The situation in Koyi mine (also called Nkoy) is very different from the other mining sites around Rubaya. Even though it is located in the exploitation area of SMB under its exploitation permit no. 4731, and is officially managed by COOPERAMMA, Koyi, a site smaller than Gakome, has a variable number of miners, though not more than 50 at any one time, is not accessible by vehicle and is a 45–60 minute walk from Rubaya center. As a result, it appears to get less attention from external visitors, auditors, etc. (e.g., it was not included in the 2014 CTC Standards Certification Audit of SMB's Coltan Mines at Bibatama [RCS, 2014]).

Only very few of the miners at Koyi have a *carte de creuseur*, (artisanal miners cards, the official registration document for small-scale miners). This is not unusual within the Congolese context, but

interviews suggest that the numbers of those possessing cards are fewer than at, for example, Luwowo mine. While some of them report that they are members of COOPERAMMA, the management of the cooperative are not usually present at the mine. For example, COOPERAMMA staff were not present during two separate visits to the mine by the Scoping Mission team. Likewise, there is no regular presence of the state mining agencies (SAESCAMM, CEEC, etc.) at the mine. Multiple interviews with miners at Koyi revealed that SAESCAMM, Division of Mines and CEEC agents only visit the mine occasionally, when asked to “bag and tag” minerals. No government officials were observed at the Koyi during two separate field visits by the team.

Contract Enforcement

SMB, the sole *comptoir* legally permitted to purchase the coltan originating from its mines in Rubaya area, does not always purchase coltan in a timely manner. Many respondents reported that delays in payments of as long as several months are common. The delays may be attributable to the need to stockpile sufficient volumes before it is worth purchasing. Some informants are of the opinion that *negociants*, pit-owners, and other middle-level figures in the mining industry facing delays in payment may be tempted to sell coltan outside of the iTSCi traceability system, in order to receive payment more quickly. The link between payment delays and smuggling has been noted by other researchers (Group of Experts, 2015).

The contract between COOPERAMMA and SMB establishes a systemic response to a situation in which SMB does not purchase the entire production of the mine. Specifically, COOPERAMMA should contact the Provincial Ministry of Mines, which should convene a commission to reach a decision regarding an alternative means to sell the minerals within 24 hours. It appears that this response is not being followed, as delays are common, as also reported in the most recent report of the Group of Experts on the D.R. Congo (Group of Experts, 2015).

In addition, there were some allegations that SMB sets the price of coltan arbitrarily, and independently of global market fluctuations. If the price offered by SMB is significantly lower than prices offered outside of the certification system, this would represent a powerful motivation for smuggling. It is reported, for example, that the price available in Rwanda is 20 percent higher than the price offered by SMB (Group of Experts, 2015).

Working Conditions for Miners and Transporters

There is currently no centralized system for monitoring how many, who, or where miners are working on a mine site. Individual pit managers or other management figures may keep their own records, but these are not systematically shared with COOPERAMMA, which runs the mining sites on a day-to-day basis. In terms of formalization and just general control there is little oversight (with the exception of D2 Bibatama, which is mined directly by SMB). Pit managers work for the “pit owners” who have purchased a lease of the pit area from COOPERAMMA. Pit owners may be miners, *negociants*, or other private actors.

This lack of information-sharing means that in the event of an accident, there is no way to confirm who may have been present at the time of the accident and hence who may be buried by a landslide or pit collapse. Sources reported that this uncertainty has allowed COOPERAMMA to minimize the numbers of fatalities in mining accidents. This has the double effect of making the mines seem less dangerous (e.g., to auditors and other people involved in certification systems) and reducing the amount of compensation that has to be paid to the relatives of dead miners. It was also reported that the amount of compensation paid to miners’ relatives after a death was somewhere in the range of \$50–\$100. There is no standardized system for reporting grievances or providing compensation that has been agreed upon; nor for enforcing any such rules over compensation in the event of death or injury due to a mining accident or for healthcare.

In some cases where individuals have tried to draw attention to the realities of an accident (e.g., identifying miners who may be buried in the mine sites but have not been acknowledged by COOPERAMMA as fatalities in the incident) the individuals have reportedly been intimidated, in an organized manner, and told to keep quiet. Cover-ups of accidents allegedly involve not only COOPERAMMA but Congolese authorities, such as the mining police. An eyewitness, for example, told the scoping mission team about a landslide that killed one miner and injured his friend. While being treated at the hospital, the friend allegedly received threats from the pit manager in reaction to his insistence that the cooperative acknowledge that miners-including his friend-had been buried in the landslide. Eventually, the family of the injured victim fled the area due to the intimidation. The woman whose son was lost alleged that she has yet to receive any acknowledgement that her son was killed in the mine and that she did not receive any compensation for his death.

Some contributing factors make proving the presence of a specific miner at a mine site at any particular moment particularly difficult. First, a large number of miners originate from other regions, and do not necessarily have relatives or strong social networks in the area. Second, no institution maintains an updated list of miners present on any given day at mine sites. Third, as indicated earlier, many miners are not officially registered and lack mining cards, which makes knowledge about the general demographics and total mining population difficult to estimate, regulate or provide services to

Those miners working directly for SMB in the D2 Bibatama mine do not have written contracts. In South Kivu, Banro has been pushed by the government and encouraged by USAID to enter into this kind of agreement with artisanal miners in South Kivu. According to management, the workforce therefore fluctuates frequently as miners in this “industrial” operation are able to work when they choose. In an interview, SMB stated that medical benefits and other arrangements have been discussed and agreed upon in meetings between SMB management and miners, and have hence been documented in written minutes. These were only for miners directly employed by SMB in its industrial operations at Rubaya.

Economic benefits to Miners. Mine workers receive payment through one of several different mechanisms. The majority of miners (*creuseurs*) receive a daily payment based on the amount of mineral material that is dug from their particular pit on a particular day. This figure, according to interviews with miners, is between \$15 and \$50 per day, depending on production. Most miners appear to mine full time, although a few appear to have land that they have farmed on their behalf. The mine pit manager determines the payment. Miners who are members of COOPERAMMA do not usually have any contracts (e.g., with the pit owners and managers that pay them), a typical situation in Eastern DRC (Rothenberg and Radley, 2014). These are much higher sums than may be earned in other sectors, such as the smallholder farming sector or petty commerce. The average income in DRC is about \$1.50 per day.

Personnel working at a washing station (*laverie*) make less than diggers and are not members of COOPERAMMA. They are typically paid on a daily rate, on average about \$15 per day. Transporters are paid per load that they transport, depending on the length of the trip. Transporters also make less money than *creuseurs*, typically about \$15 per day. Transporters are not members of COOPERAMMA.

Mine workers are generally considered to be well paid and the neighboring town of Rubaya has far more businesses, and a much higher population, than other towns in Masisi Territory. Several interviewees, including administrators, mentioned the rapid growth of the town over the last few years, which they states was directly linked to the minerals trade. As other researchers have argued, “ultimately, working in mining is a livelihood strategy”; at the same time, given the levels of risk and physical hardship involved and the large profits made by upstream actors, some miners see themselves as exploited (Rothenberg and Radley, 2014). Few if any miners complained to the Scoping Mission members about the amounts that they are paid.

Technical Safety Assessments

Due to the large number of accidents (e.g., six accidents in the Rubaya area alone between December 2012 and May 2013, according to reported by the *Association pour le Développement des Initiatives Paysannes* [ASSODIP]), it is important that technical assessments of mining practices be undertaken to make mining practices safer (ASSODIP, 2013). SMB personnel stated that they have had soil samples professionally tested in order to improve their understanding of the risks of landslide and pit collapse, and have changed their approaches in D2 Bibatama as a result. Pit mining has also been suspended in Luwowo, presumably because of the risk of accidents. Under the Mining Code of the DRC, the maximum legal length or depth of a pit (or “gallery” if it is dug horizontally into the hill rather than vertically) is 30 meters.

There was a major accident at the Koyi mine in May 2013. According to Congolese media, a portion of the steep hillside about 20 meters deep and several hundred meters wide collapsed, burying “dozens” of people (Radio Okapi, 2013). According to interviews, the landslide was accompanied by a sudden flood of water that washed several people down the hill and into the nearby river. Local people were unable to give precise figures of the dead, but estimates ranged from 70–100 people, with a local customary leader stating that there were 40 women living in his jurisdiction who had been widowed due to the accident. A Congolese NGO estimated the total number of deaths at 80 (ASSODIP, 2013) while MONUSCO reported that “nearly 100” people were killed (MONUSCO, 2013).

**FIGURE 2.5: LANDSLIDE AT GAKOMBE SITE, JANUARY 2015
(SOURCE: CONGOLESE MINING AGENCIES)**



Following the accident, all activities at the mine were suspended for nine months. According to miners on the site, as well as local customary leaders interviewed, no changes were made to the mode of production, working conditions, or any other aspects of mining at Koyi. Site visits indicated that mining has resumed at three different levels of the steeply-sloping site, which could precipitate further landslides in the future.

Interviews with local customary officials and miners at Koyi mine suggest

that official reports of accidents are not shared with miners. A photo of a recent accident (January 2015) is included in Figure 2.5.

Infrastructure

Road Conditions. The road from Goma to Rubaya is in fair condition, due to repairs by MONUSCO and COOPERAMMA. There is one section which is impassable during heavy rain, but the road was not mentioned as a constraint by any stakeholders. However, the roads from Rubaya to other mine sites (such as Mufunzi and Bishasha) are impassable by cars during the rainy season. This represents a constraint to effective monitoring and auditing of the sites.

Water Supply and Laverie (washing station) Improvements Planned by SMB. SMB plans to centralize the washing stations, in order to have a smaller number of (larger) washing stations that are more easily monitored. SMB staff contend that this will reduce the extent to which mineralized material is transported around the site, potentially reducing the costs of production (slightly) and potentially reducing risks of minerals smuggling and fraud.

2.3.2 IMPLEMENTING TRACEABILITY AND DUE DILIGENCE SYSTEMS AT SCALE

Composition, Capacity, and Role of Cooperatives

COOPERAMMA is the sole cooperative representing miners in the mines visited in North Kivu. It has significant financial capacity, as evidenced by the various road rehabilitation and other projects that it has implemented in the Rubaya area. It has an exclusive contract with SMB to exploit minerals on the SMB concession; from a certain perspective, is therefore in a strong economic position. However, as mentioned elsewhere in this report, actors in the minerals sector often experience delays in payments for coltan, and COOPERAMMA has not succeeded in resolving or mitigating those problems.

Awareness-Raising, Accountability, and Transparency

Several official evaluations of mining practices at the SMB sites have been conducted, including the initial CTC baseline study by BGR (Priester, 2012), a CTC assessment in 2014 (RCS, 2014). However, SMB staff and other key stakeholders were unable to mention specific evaluations, choosing instead to list visits by various external actors (NGOs, diplomatic staff, etc.) as proof of “auditing” of the traceability system at the mines in Rubaya. Miners and others working at the site were unable to cite any processes or outcomes of audits or evaluations that had taken place.

The Role of the State

As noted elsewhere in this report, numerous state agencies are engaged in monitoring, regulating,

Comite Provincial de Suivi (CPS)

- Provincial Minister of Mines
- Civil Society
- CEEC
- Private sector mining company
- Cabinet member of the provincial government
- Provincial ministries responsible for: interior, security, human rights, mines, work, transport, communication
- SAESSCAM
- Cellule Technique de Coordination et de Planification Miniere
- Security: FARDC, Police national
- Central bank of DRC
- MONUSCO
- BGR
- Delegates from: Federation des Entreprises du Congo, *Negociant*, Cooperatives and Treatment Entities

Source: Ministry of Mines, *Arrete Ministerial 35 (2012)*

policing, and supporting the mines in Rubaya. These include SAESSCAM, CEEC, Division of Mines, the Police des Mines, and other institutions. Several state institutions are also members of multi-stakeholder platforms such as the *Comités Provinciaux de Suivi* (Provincial Steering Committee [CPS]). The table below lists the members of the CPS as designated by the Ministry of Mines (Arrete Provincial 12/035/GP/SK).

The roles of state institutions in the day-to-day regulation of the mines in many cases differ from their official mandate.

Stakeholders interviewed characterized SAESSCAM as fulfilling a role in the “bagging and tagging” of minerals, but much less involved in its other responsibilities, such as training and awareness-raising. CEEC was also characterized as only partially “present” in the day-to-day regulation of the mines, as their mandate is to work at the *comptoir*,

and not the mine site level. The imposition of unofficial (hence illegal) taxes or fees by state authorities were not reported to be very prevalent in Masisi, but details regarding such taxes and fees are difficult to collect and verify. Representatives of the mining police were not willing to discuss the challenges of the mining sector in any depth with the team, giving the strong impression that they were worried about particular sensitive issues being revealed. They are seen by many stakeholders as adding little value except for providing a basic level of security around the mining sites. In general, state institutions are not yet taking on the full range of responsibilities that they have been assigned by the Government. These findings reflect the analysis of other researchers (e.g., PROMINES AMI 27, 2015, undated a, undated b, and undated c; and Blore, 2014).

2.3.3 CUSTOMARY AND STATUTORY TENURE ARRANGEMENTS

All but one of the mines visited in Masisi had tenure conditions clarified in a contract between SMB and COOPERAMMA. Under the contract, SMB is acknowledged as the owner of the concession (as it was granted an exploitation mining permit issued by the Congolese state), while COOPERAMMA is acknowledged as the day-to-day manager of small-scale mining activities. According to interviews, individual pits are leased on a commercial basis, rather than according to any customary claim. Pit ‘owners’ who actually lease the pits pay COOPERAMMA, which manages all day-to-day production issues. Pit owners are often small-scale *negociants* or are wealthier, more experienced miners. They can also be businessmen who do not mine directly and see the pit as a pure investment (i.e. not as their sole career). There were no reports of disputes based on customary claims to land and/or minerals.

SMB staff stated that local people had built houses within the SMB mining concession area, and continued to do so. The mining concession is large and is not fenced, making it relatively easy for local people to construct inside it. Observations around the mines showed that there are substantial settlements within the concession area. SMB staff stated that the company had expropriated certain households that had built houses very close to the mine; and that the payment of compensation to such households may act as an incentive to other households to settle within the concession in the hope of receiving future payment. It is not clear to what extent households living within the SMB concession claim any rights under customary tenure. When necessary, SMB engages COOPERAMMA as an intermediary to resolve conflict between the mine owner and local households (rather than negotiating directly with customary chiefs, for example).

Koyi/Nkoy mine has a different tenure situation from the other mines. According to local miners and customary authorities, the Koyi/Nkoy mine is customarily “owned” by two families living in the area. Most of the miners are associated with these families (i.e., part of an extended family network). Other individuals who are not “local” work on the mining site but are limited to secondary occupations, particularly washing the mineralized material. These secondary roles are not as well paid as the main mining (*creuseur*) activities, and non-locals complained more generally about discrimination in working conditions. This could become a problem from the perspective of inter-ethnic cooperation and economic and political stability.

Inter-Ethnic Cooperation and Conflict

It was mentioned by several key informants that there is some ethnic discrimination within COOPERAMMA. Most local institutions involved in artisanal mining are dominated by Hutu. While non-Hutu are able to become members of COOPERAMMA, they are allegedly given less profitable roles in the mines. This situation may potentially exacerbate socio-ethnic and socio-political tensions. This situation is not linked to tenure claims, *per se*, but is related to a sense of numerical and political dominance on the part of the Hutu in this section of Masisi, which can be conceptualized as forms of customary identity politics.

The relationship between COOPERAMMA and SMB was, prior to the signing of a contract, highly conflictual (Preister, 2012). Key informants reported incidents of violence between high-level personnel of COOPERAMMA and SMB (then called MHI). On one occasion in 2013, miners and the local population protested the imposition of fines by MHI for those who did not participate in road rehabilitation, a community labor effort orchestrated by MHI with support from the administration (Cuvelier, J., et al. 2014). The violence was linked to the broader struggles but was being carried out at a personal level (i.e. plans to attack and/or assassinate key personnel). Though the relationship has improved, it is still highly complex, given the political roles of the leadership of both organizations and the almost unavoidable links among ethnicity, politics, and (in)security in Masisi (as the leadership of COOPERAMMA and SMB are from different ethnic groups). The ongoing cooperation between COOPERAMMA and SMB is therefore arguably of great importance for the socio-political stability of Masisi and North Kivu more generally.

2.3.4 SPECIFIC ROLES, CONTRIBUTIONS, IMPACTS, AND CONSTRAINTS THAT MEN, WOMEN, AND YOUTH EXPERIENCE IN THE ASM SECTOR

Women

The only women encountered at the mine sites in Rubaya were women selling a sorghum drink and food to miners. There were also women operating small restaurants and shops in an area within a short walk of several mine sites. When asked about compliance and traceability system, miners, COOPERAMMA staff, SMB staff, and other stakeholders frequently mentioned the absence of pregnant women and children in mining sites. This element of mine-site validation has been clearly communicated to a number of stakeholders. No pregnant women were observed at the mining site.

More generally, the presence of a large number of men, especially younger men, with relatively high incomes from the mining industry, has led to situations of sexual exploitation in the towns and villages around the mining site. Commercial sex work is associated with relatively high levels of gender-based violence. However, there is a lack of documented data on the number of cases of violence against sex workers and women and girls more generally.⁶ Most cases are not reported.

Youth

The NGO representatives amongst the team have been involved in advocacy and monitoring campaigns (often with support of NGOs such as Free the Slaves) regarding child labor in the mining sites. The NGO staff report that young children no longer work in the mines around Rubaya. No young children were observed at the mining site, although it was not practicable for the team to verify the ages of young men/teenagers.

With agricultural production declining and few other employment alternatives, youth are unsurprisingly showing more of an interest in mining than in continuing formal education. Distractions for youth are also somewhat limited, with the former football terrain taken over by a camp for displaced persons. Prostitution of young girls from the age of 10 was reported by a CSO representative, who explained that the young children are often from other locations and are the victims of human trafficking.

Outside of the mining sites, young children were present at informal *laveries* located downstream from the mines. Members of the local community wash the mineral detritus (i.e., the material washed away from the *laveries* in the mine sites) in order to reclaim some coltan residues. Interviews with people engaged in this process suggest that it is not a lucrative activity, as very little coltan can be retrieved each day.

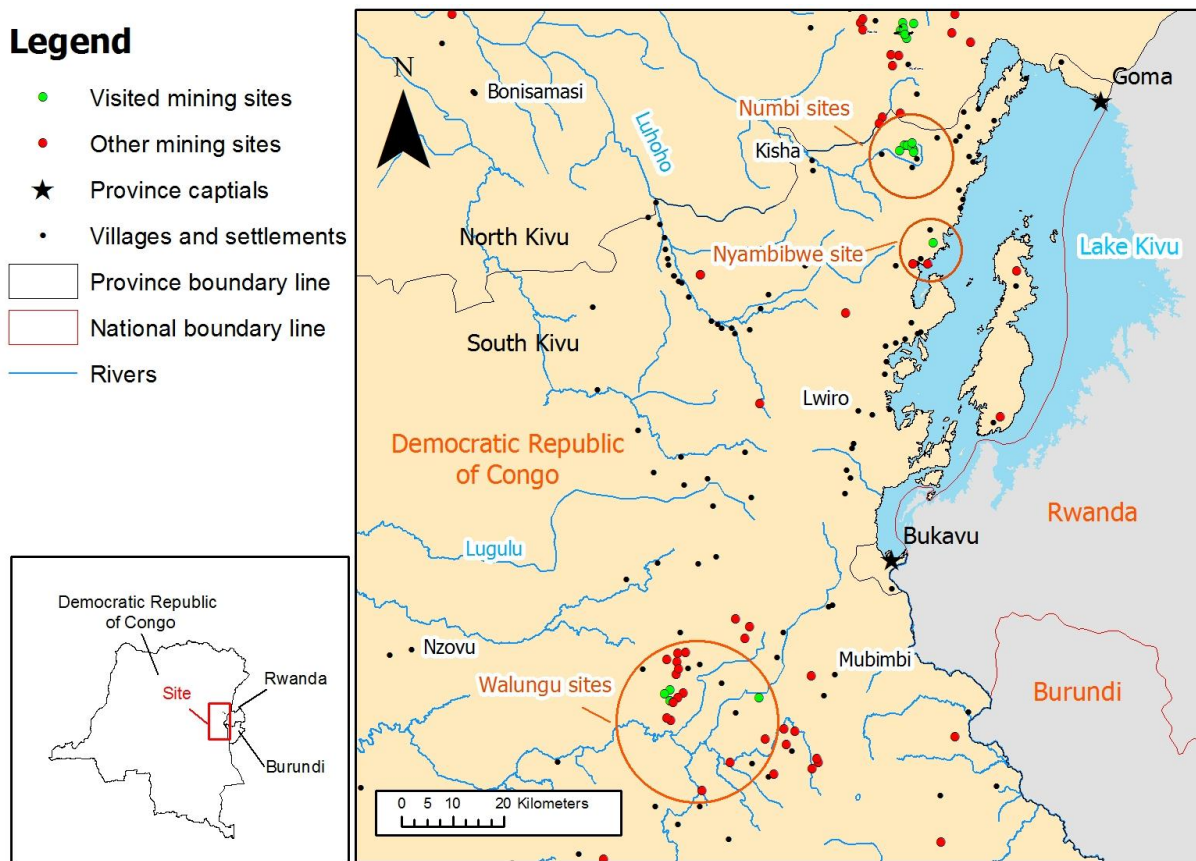
⁶ Interview with a women's CSO member in Rubaya town.

3.0 SOUTH KIVU

3.1 CONTEXT

In South Kivu, the Scoping Mission team visited three distinctly different locations, each with their own contextual factors with respect to mineral extraction and traceability. In Numbi, artisanal mining sites have not yet been certified or validated, yet extraction of the 3Ts and gold continues. Nyabibwe, in contrast, is one of the locations where the iTSCi traceability scheme was piloted, and is ongoing. Finally, the Walungu-Nzibira area consists of a combination of validated, certified sites with active exploitation and uncertified sites with limited levels of exploitation. The primarily minerals exploited in all three sites include coltan, cassiterite, gold, wolframite, manganese, and tourmaline and all mines are artisanal.

FIGURE 3.1: SOUTH KIVU SCOPING EXERCISE



3.1.1 NUMBI

The locality of Numbi in Kalehe territory in South Kivu province is located in the Hauts Plateaux of Kalehe above Lake Kivu. Over two hours on a motorbike is required to reach Numbi from Kalungu, a mere 26 km away. While the road refurbishment work between Kalungu and Numbi was initiated in December 2014, the road remains in poor condition. Referred to as “a place where every armed actor in the Kivus seems to have an interest,” and as, “a source of income for the RCD and for Rwanda during the

military occupation” of the late 1990’s, the high plateaus contain coltan, cassiterite, and tourmaline among other valuable minerals (Kibasomba, 2011; Panel of Experts, 2001). Previously designated as a set of “red” sites due to the presence of armed groups, including the Mai-Mai and the FARDC as recently as October of 2013, Numbi is now secure with no reports of armed groups in the region.⁷ The legacy and continuing impact of the Rwandan presence in the Numbi region is quite complicated, with divisions among Rwandaphones and between Rwandaphones and “indigenous communities” (Concorde, 2009).

Two cooperatives are active in Numbi: COMIAB and COOPIANUBU. COOPIANUBU has an accord at the national and provincial levels; is familiar with the sites; monitors production levels; and enjoys a strong rapport with the mine pit owners. COMIAB, which is smaller, works primarily at the Biriki mine site, and interestingly the cooperative’s president is also the land owner and mine pit manager. COMIAB’s president was also originally a founding member of COOPAMIHANBU. The sites visited during the scoping exercise were all located on Permit d’Exploitation (PE) 2598; the mining title to this PE was granted in April 1999 to state-owned company SAKIMA. COOPAMIHANUBU, and more recently COMIAB, have engaged with SAKIMA in an effort to formalize and progressively mechanize mining activities, however progress has been slow and will require additional capital inputs and training before additional progress can be made.

From a legal perspective, until the Numbi sites are validated green, all 3T production is illegal. Nonetheless, coltan and cassiterite, which used to be the main driver of Numbi’s economy, continue to be mined as mixed ore in Fungamawaka, Misumari, Biriki, Koweit and other sites.⁸ Over the past few years the number of miners present on those sites has decreased due to a significant reduction in the price paid for (illegal) material produced on non-validated sites. As a result, many miners turned their attention to tourmaline and gold. Yet every week up to five tons of 3T minerals are reportedly produced in Numbi and transported to areas where they can be tagged. It is widely reported that Numbi-produced cassiterite is regularly used to enhance the falling mineral content of cassiterite produced in Nyabibwe, where mineral content is poor.⁹

COMIAB and COPAMIHANUBU currently operate in slightly different fashion. COPAMIHANUBU pit managers sell their team’s production directly to local traders (*négociants*) who are also members of the cooperative. The cooperative meanwhile receives USD 0.1 per such traded kilo (USD 100 per ton), to fund its operations and administration. In contrast COMIAB reportedly buys minerals from its sites to process and sell itself to *négociants*, or exporters. In practice both cooperatives admit to the possibility of minerals currently being sold outside of their control. The capacitation of cooperatives to monitor and better capture / record the entire production from the sites they manage is therefore absolutely key towards ensuring that the supply chains originating from Numbi are fully transparent.

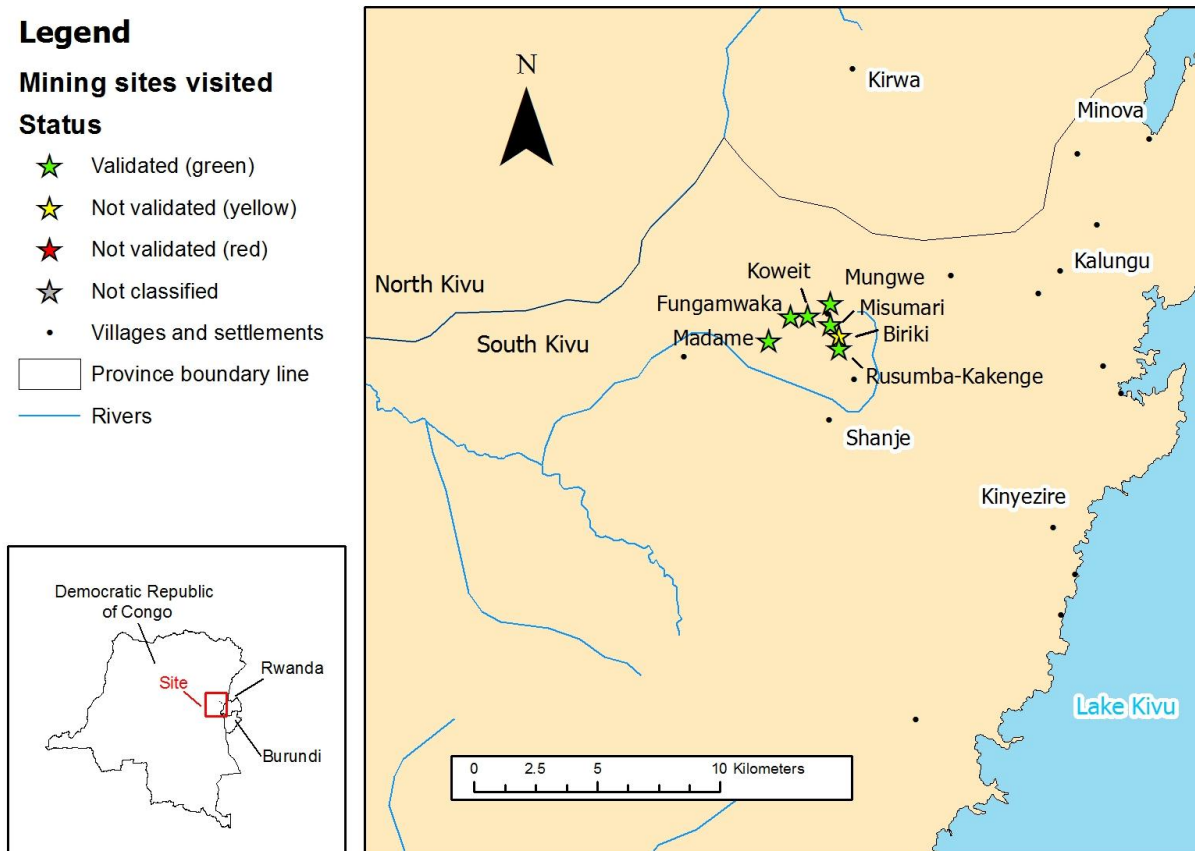
Seven mine sites in Numbi (see Figure 3.2) were visited as part of a validation mission in late March 2015, after this scoping exercise was conducted. The results of the validation mission are pending the approval of the National Mining Minister, but preliminary findings suggest that six out of the seven sites are likely to be validated. The seventh site (known as “Biriki”) was yellow-flagged owing to the death of a miner the day before the validation team arrived. The local cooperative and pit manager were reluctant to provide details about the accident, or access to the Biriki site.

⁷ In October 2013, for example, there was a report of deaths resulting from an exchange in gunfire involving Mai Mai and Mai Mai Nyatura at Lumbishi (approximately two hours by foot from Numbi). This incident resulted in increased coverage of the area by FARDC, the armed forces of the DRC (PACT, 2013). Interestingly, while ostensibly responsible for assuring security, FARDC soldiers themselves took control of sites in Numbi (Stearns, 2012)

⁸ BSP Numbi Brief, 2015 (Draft)

⁹ Source: BSP Numbi Brief, Numbi cooperatives, and SAESSCAM agent Nyabibwe.

FIGURE 3.2: NUMBI MINING SITES



3.1.2 NYABIBWE

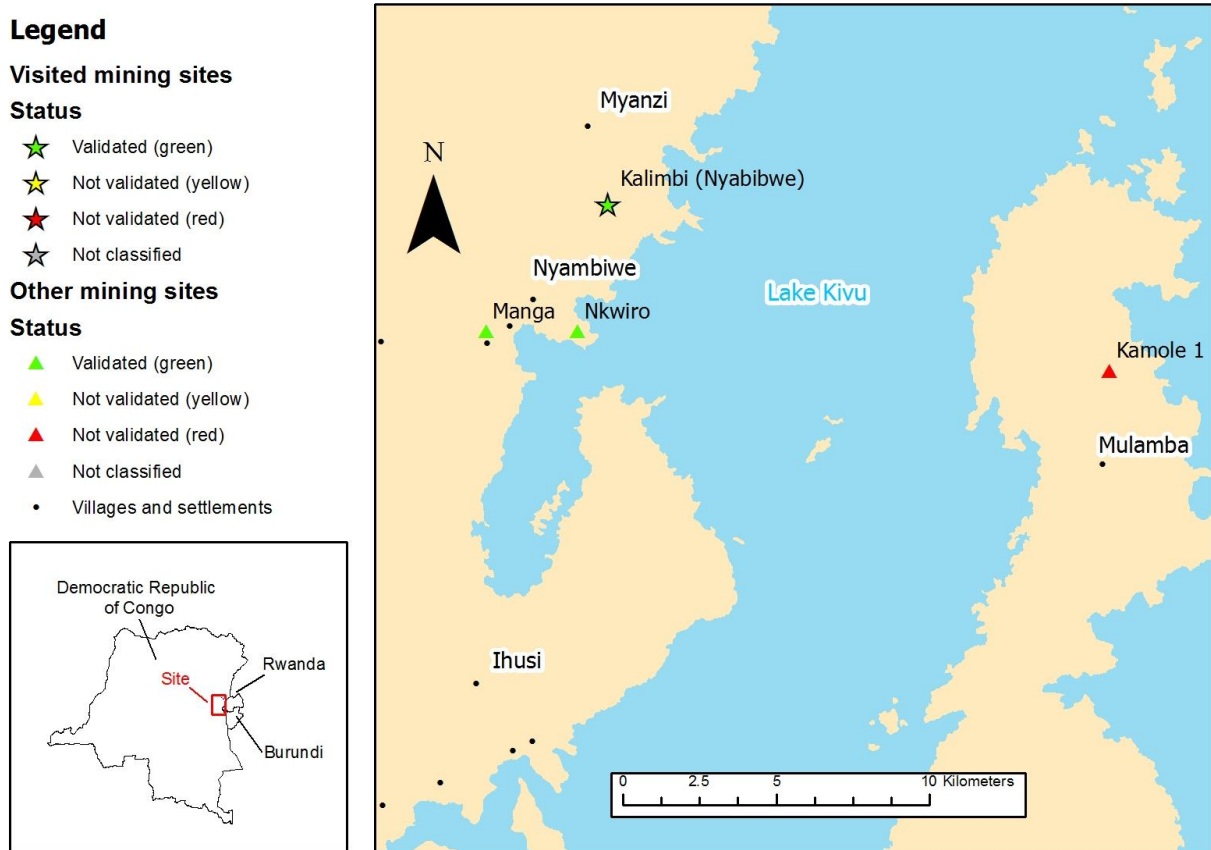
Nyabibwe is a commercial center approximately 100 kilometers north of Bukavu in the territory of Kalehe in South Kivu. The primary mining activity centers in Kalimbi, a cassiterite mine. Close to the Rwandan border, Kinyarwanda is the most commonly heard language in the mining site (Rothenburg and Radley, 2014). Due to flooding, the Kalimbi mining site comprised of T20 and Koweit is not currently active (Rothenburg and Radley, 2014). There are two active cooperatives in Nyabibwe: *Coopérative minière pour le Bien-être des Communautés de Kalehe* (COMBECKA) and *Coopérative Minière de Kalimbi* (COMIKA). Tension between the cooperatives over control of the two most productive tunnels of Kalimbi persists. In 2012, the sites became a pilot of the iTSCi traceability and due diligence system.¹⁰ Not all of the sites in Nyabibwe are validated; some are deemed to not be worthy of exploitation due to falling production levels.¹¹ The fall in cassiterite prices prompted some miners to leave Nyabibwe/Kalimbi for other areas, including Rubaya in search of coltan, as noted in the 2013 IPIS report (Montejano, 2012). Some of the miners interviewed during the scoping study attributed the fall in prices

¹⁰ “Launched on 24 October 2012 at the Kalimbi mine near Nyabibwe, the CFTI [Conflict-Free Tin Initiative] is based on a closed-pipe model whereby all players in the vertically-integrated supply chain are known. Cassiterite produced at Kalimbi is processed through the iTSCi traceability and due diligence system, and sold on to a handful of end-user companies who have signed up to the project” (Global Witness, 2013).

¹¹ For instance, *Comite Provinciale de Suivi* disagreed with the suggestion by the team to consider qualifying and validating the Kiboto site, as geologic investigations proved that this site is not viable-it does not have an anticipated high level of production.

to the introduction of the iTSCi system; independent and credible data to confirm this correlation was however not available.

FIGURE 3.3: NYABIBWE MINING SITES



3.1.3 WALUNGU

The Walungu region serves as an interesting case study on two fronts: first, customary law is quite strong in the region, with a Mwami exerting customary powers alongside governmental authorities; second it is home to a mix of artisanal and industrial mining sites. The Mwami, a customary chief, serves as a land administrator and an arbitrator in land disputes. Economic and political crises in the DRC beset attempts by SOMINKI, *the Societe Miniere et Industrielle du Kivu*, to industrially exploit iron ore in South Kivu.

During much of the 1990's the company's commercial output was nearly entirely dependent upon artisanal miners¹² (IPIS, 2012b). Canadian mining company Banro purchased SOMINKI's mining rights in 1996. During the "Congo wars" of 1996 and 1998, non-state armed forces controlled the South Kivu mines. In 2003, Banro's activities in South Kivu for the exploration of gold were officially launched (Triest, 2013). From 2003 to 2010, various armed groups (including the FARDC, the armed forces of the DRC) appropriated from the official Banro site and illegally exploited minerals. Following the passage of the Dodd-Frank Act in 2010, the Ministry of Mines (MoM) issued a decree suspending all mining operations in North and South Kivu (Ministry of Mines, 2010). In spite of the suspension, artisanal mining of cassiterite and wolframite continued on land that officially is a part of the Banro concession.

¹² Miners who formerly worked for SOMINKI in areas such as Lutunkulu refer to themselves as the "former workers of SOMINKI!" and some of the younger men interviewed in the field identified as "the children of former workers of SOMINKI!"

Banro faces a major challenge for both its security and reputation as it tries to manage and coexist with artisanal mining (Triest, 2013, p. 52). In one incident in Lutunkulu in 2012, Banro geologists were chased away by artisanal miners, preventing them from continuing with plans to extract minerals in active artisanal mine sites (Byemba, 2012). In the past three years, Banro has adopted a much more pragmatic and progressive stance and now regularly engage with ASM populations in part through IOM and providing support to a local cooperative.

FIGURE 3.4: WALUNGU MINING SITES

Legend

Visited mining sites

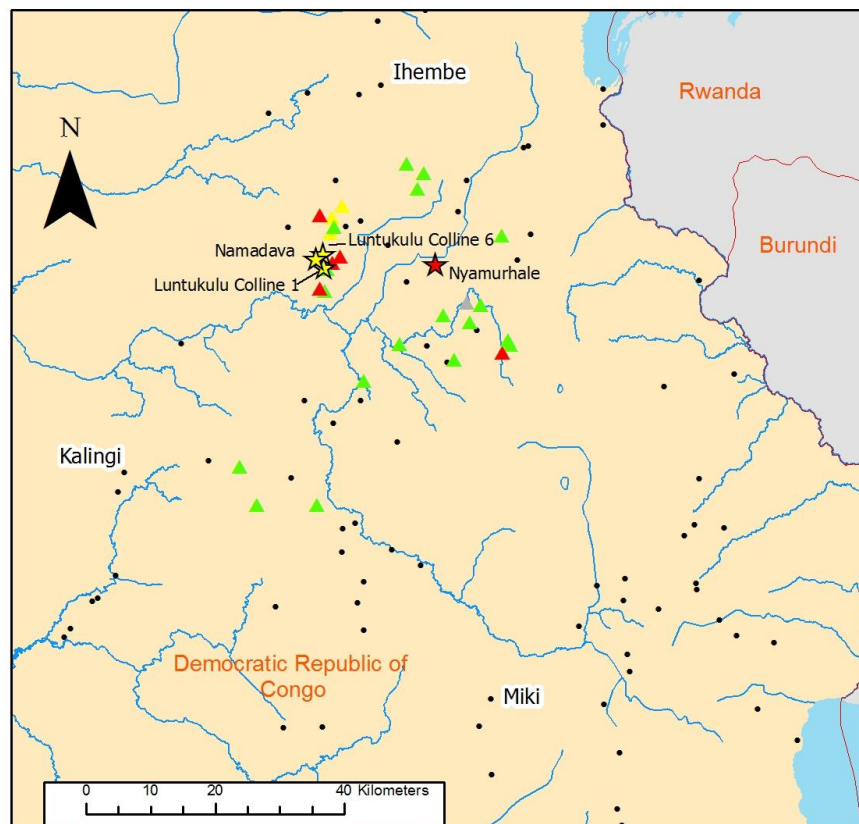
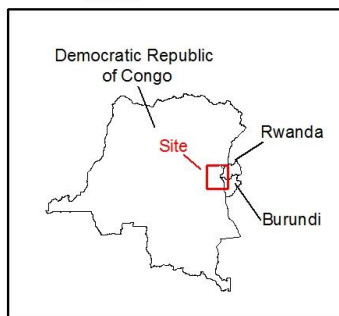
Status

- ★ Validated (green)
- ★ Not validated (yellow)
- ★ Not validated (red)
- ★ Not classified

Other mining sites

Status

- ▲ Validated (green)
- ▲ Not validated (yellow)
- ▲ Not validated (red)
- ▲ Not classified
- Villages and settlements
- ▭ National Boundaries
- Rivers



3.2 RESEARCH APPROACH

3.2.1 OVERVIEW OF RESEARCH METHODS

Between January 21 and 30, 2015, a team of government officials from the MoM, civil society and CBRMT staff conducted a Scoping Mission in three artisanal mining areas of South Kivu: Numbi, Nyabibwe, and Walungu. The team of 12 included individuals from South Kivu-based organizations:

- *Bureau d'Études Scientifiques et Technique* (BEST, one representative);
- Better Sourcing Programme (two representatives);
- CEEC (one representative);

- Division of Mines (one representative);
- *L'Observatoire Gouvernance et Paix* (Peace and Governance Observatory, one representative);
- Provincial Ministry of Mines (one representative); and
- Tetra Tech (two CBRMT staff).

This team was further divided into three sub-teams led by CBRMT staff and partners. While leadership across teams remained consistent, the sub-team composition varied each day. The sub-teams were tasked with interviewing a select number of stakeholders, organized into three broad categories (see Table 3.1). Each sub-team utilized the pertinent sections of the Interview Guide (Appendix A) to guide their research.

TABLE 3.1: STAKEHOLDERS

Governmental Officials	Civil Society	Miners (Formal and Informal)
<ul style="list-style-type: none"> • Chef de Poste • President of COMALU • SAESSCAM • Administration des mines • FARDC/DEAGRI • Mining Police/Police 	<ul style="list-style-type: none"> • Chef de groupement • Mwami • Community-based organizations (e.g., agro-pastoral associations, women's associations) • Health centers • School staff (principles) 	<ul style="list-style-type: none"> • OBC: <i>cibler des associations minières</i> • <i>Creuseurs</i> (including transporters, those washing minerals, etc.) • <i>Negociants</i> • Businesses indirectly affiliated with mines (e.g., motorbike riders, women-owned businesses)

The Scoping Mission Team visited 11 artisanal mine sites (see Table 3.2), and interviewed approximately 100 individuals over the 10-day period.

TABLE 3.2: SITES VISITED

Numbi: 3Ts	Nyabibwe: 3Ts*	Walungu: 3Ts and Gold
<ul style="list-style-type: none"> • Biriki • Kakenge • Kuweit • Madame • Misumouri • Mungwe 	<ul style="list-style-type: none"> • Koweit 	<ul style="list-style-type: none"> • Colline 1** • Colline 6** • Namadava • Nyamurale

**Due to rainfall, the team was only able to visit one site in the Nyabibwe/Kalehe area. References to findings from Nyabibwe almost exclusively reflect conversations with actors found in Nyabibwe town center.*

***These numbers are a part of the name of the site.*

This sample of sites is inclusive of the 3Ts and gold; of validated “green” mine sites, as well as non-certified “red” mine sites; and of the presence and absence of the iTSCi traceability system. During daily debriefing sessions research teams collated notes and then shared highlights of their findings with the larger Scoping Mission Team. During this stage, researchers began analyzing the implications of the insights and brainstorming options for addressing the myriad of challenges and for capitalizing on the opportunities. The group consolidated their findings and developed a presentation for the *Comité Provincial de Suivi* on Saturday, January 31. The responses of the CPS have been integrated into this report, *inter alia*, and especially in the recommendations section.

3.3 FINDINGS

3.3.1 INCREASE THE SCALE AND QUALITY OF CONFLICT-FREE MINERAL SUPPLIES

Weaknesses in the Due Diligence and Traceability System

Similar to the situation in North Kivu, there are numerous steps involved in the processing of minerals and the fact that washing and drying often occurs away from the mine site—thus creating a major weakness in the traceability system. There is evidence in South Kivu of miners and *negociants* drying and tagging minerals at home. There were also reports of minerals from unvalidated sites being bagged and tagged in nearby validated sites by corrupt officials at an established rate per kilo. Interviewees belonging to members of a cooperative in Lutunkulu shared detailed descriptions of this practice and stated that SAESSCAM agents organize this process. Artisanal miners are legally required to purchase and carry a *carte de creuseurs*, however in reality few miners are registered, and the law is inconsistently enforced. The low level of registration is not unique to South Kivu; across the DRC, miners rarely purchase these cards issued by the Mining Division, citing the cost relative to the benefit of card ownership. A report by IPIS states miners perceive few benefits in return for card ownership, as it does not guarantee any technical support or better infrastructure, is not easy to obtain, and is perceived to be cost prohibitive (IPIS, 2012b, p. 12). Several miners interviewed by the scoping team indicated they hold a membership card for a cooperative, but not an individual *carte de creuseur* as the former is considered to be more important and useful.

In Nyabibwe, the apparent block to launching construction of a CdN is a property rights dispute. CPS members explained that IOM was supposed to *build* a CdN in Nyabibwe center, however, later it was agreed that IOM would simply *rent* a building that would serve as a CdN. At the end of the IOM-funded project under the Stabilization and Reconstruction Plan for Eastern Democratic Republic of the Congo, the rent was to be paid by CPS, which was not done because CPS realized that the indicated house did not have enough water for the *negociants* to treat their minerals. This is the explanation given for the reason why *negociants* continue to treat minerals at their homes in the absence of a CdN.

This Trading Centers Initiative—the promised installation of a CdN is an allusion to the Trading Centers Initiative funded by USAID and the UN Peacebuilding Fund in 2009— is to encompass road rehabilitation and training of police forces to secure routes. A prerequisite for investment in road infrastructure is the presence of validated mine sites, so areas such as Numbi are ineligible for such support at this time. *Negociants* and governmental authorities in the Nyabibwe area complained about the decline in price for the minerals, which they attribute, in part, to the introduction of the iTSCi system. While the reality is much more complicated than this perception, it is worth noting, as it is a common perception among key actors. A member of the Mining Police in the Walungu area of Nyamurale explained that the low price of minerals results in no positive impact to the mining communities: “The buyers (*negociants*) come and go from Bukavu [with minerals] and leave the population in misery.”

Working Conditions

While it was difficult for the scoping team to ascertain the actual frequency of mining-related injuries and accidents, visits to health centers in the mining towns reveal that there are likely more accidents than officially reported. At Lubona Health Center, for instance, it was reported that there is approximately one serious mining-related injury every two weeks. The lack of access to accurate data on mining-related injuries is attributable to inconsistent data management, intimidation of miners by pit managers or cooperative leadership, and fear of miners themselves of reporting. Miners, pit managers, concessionaires, and cooperatives share a fear of the potential consequences to mining operations if too many accidents are reported, resulting in underreporting.

There were no recent reports of landslides, although they have been reported in the past. For example, in September 2013, six miners died as a result of a landslide at Fungamwaka (Radio Okapi, 2013). While accidents were not reported by miners themselves in Nyabibwe, other reports do cite recent accidents in the area. For instance, a pit collapse at the Kuwait mine in Nyabibwe in July 2013 killed, “a 26-year old miner working alone at the time of the collapse who left behind a wife and two children, and who received no compensation following his death” (Rothenberg and Radley, 2014, page 66). In March 2013, another miner died due to lack of oxygen in a tunnel, when a machine meant to support air flow broke down (Rothenberg and Radley, 2014). This accident reportedly occurred in a tunnel more than 500 meters in depth. Tunnels in some locations can be unsafe regardless of whether they fall under the 30 meter limit set by the 2002 Mining Code. For instance, in locations such as Misumari and Fungamwaka, there is a risk of landslides due to the instability of the soil. In locations where soil is stable but tunnels are deep, then the presence of properly functioning breathing equipment is essential for safety. Tunnels also pose environmental risks and associated health risks for downstream communities when large volumes of water used to treat the minerals flow downstream into the Nyawaronga River in the Numbi area, carrying with it large volumes of sediment from the pits.

Economic Benefits to Miners

In Nyabibwe, one miner described the importance of mining to the surrounding communities as follows: “The mines contribute to the development of the town and of the church; without the mines, there is not a life in Nyabibwe.” Given the critical importance of mining in these regions, the instability of mineral prices was frequently cited as a concern among both miners and *negociants*. A reduction in production of minerals was also observed by the scoping team in several sites, including Nyabibwe and Nzibira, where historically active mines are now dormant. Miners explained that they are not producing as much as they did in the past due to a lack of materials, flooding, or the depth of the minerals. As reported in the CBRMT 3Ts Report (USAID 2014), recent low levels of production are due to the fact that mine shafts have become too deep, which creates technical issues such as problems evacuating water and pumping in oxygen, has vastly reduced the economic activity of the town. This reduction in production, particularly at Nyabibwe was also cited in the CBRMT 3T assessment (USAID 2014). Miners and *negociants* expressed frustration relative to these needs, suggesting that multiple promises made by those intervening in this sector—including the UN, IOM and representatives of iTSCi remain unfulfilled, including the construction of *Centres des Negoce*¹³ and the provision of materials.

Several miners referred to the monopoly of the market due to the existence of a unique *fonderie*. In Nyabibwe, several miners and *negociants* also made reference to the decline in prices, with a decline of \$1–\$2 per kilogram, which occurred after the iTSCi scheme was introduced. Some miners believe this is a causal relationship. In conversations with miners, there was little-to-no awareness of the market value of the minerals they are exploiting, nor of their end use. This lack of information about the marketplace can result in real or perceived exploitation of miners. In some cases, *negociants* are accused of actively withholding information; in other scenarios, miners distrust the *negociants* and do not believe that the *negociants* have to incur costs in order to sell (particularly untagged) minerals. There is a widespread perception of a monopoly as the buyers all tend to sell to a single smelter. There is also a perception that the cost of the iTSCi system is being transferred to the *negociants* and the miners themselves, in the form of reduced prices for tagged minerals compared to the pre-iTSCi period.

Stakeholders such as *negociants*, cooperatives, Division of Mines staff expressed concern to the scoping team that expansion of the iTSCi system, through validation of sites by organizations such as BGR and IOM who are charged with carrying out qualification missions at site, is moving too slowly.

¹³ It should be noted that during the roundtable meeting with the CPS, it was noted that one of the barriers to the construction of the CdNs in places such as Nyabibwe revolved around land rights.

The prices miners receive for minerals vary from site to site and appear to be reflective of the following variables:

- Whether the minerals are bagged and tagged. Untagged minerals fetch a lower price than their tagged counterparts. The *negociants* claim this is because the difficulty they have in locating buyers for untagged minerals and because of the risks they assume in trying to sell these minerals in a clandestine manner.
- The amount of taxes (legal and otherwise) incurred by the *negociants*. They reduce the rates they offer miners in an attempt to recover some of these costs (see the subsection in 3.3.2 on taxes and fees).
- The quality of the minerals.

The price of minerals in locations such as Numbi is difficult to ascertain due to the alleged blending of minerals from Nyabibwe. Cassiterite in Numbi is said to sell locally for 5 to 6 dollars a kilo (mineral content is unverified but understood to be around 60%). Coltan from Numbi allegedly fetches \$25/kg but that is also illegal as there are no official exports of coltan from South Kivu (the tax on coltan at the mine is 10 times that of cassiterite so coltan tends to hide). The reported prices for minerals from miners and *negociants* in Nyabibwe and Lutunkulu is reflected Table 3.3 below.

TABLE 3.3: PRICES FOR MINERALS

Mineral	Location	Price per kg in USD	Variables
Cassiterite	Lutunkulu	\$4	Untagged
Wolframite	Lutunkulu	\$3	Untagged
Cassiterite	Nyabibwe	\$5	Tagged
Coltan	Nyabibwe	\$25–\$30	Tagged

In some instances, when the *negociants* do not have adequate cash to purchase minerals, they “purchase” minerals on credit from the pit owners. In such cases, the payment is often delayed, frustrating miners.

Infrastructure

Road Conditions. In locations such as Numbi where the traceability system is not yet introduced, road conditions do not permit vehicles to reach mine sites. Instead, miners must transport their loads either by motorbike or, more frequently, by foot. Women often bear the tremendous workload of descending from Numbi to Kalungu a distance of several thousand feet.¹⁴

Water Supply. The artisanal method of exploitation requires concentrated water flow in order to break down the soil so that the land will give way to the chisels and shovels used to break apart the earth in search of minerals. Water is also used to wash the rock at *laveries*, where minerals are separated from the rest of the soil. An adequate supply of water is not assured in many of these locations, which in some cases has resulted in the temporary abandonment of sites. In Numbi, water reservoirs on mountain tops are managed by the cooperatives to release water at specific times. If there is inadequate rainfall, then these reservoirs do not fill and miners do not work.

In other locations, such as the sites near Nyabibwe, the problem is actually an excess of water, which has flooded some of the tunnels (including a tunnel referred to as *maternite* because it used to be the “mother lode” of mineral production in the region).

¹⁴ IOM apparently has financing to rehabilitate the Numbi road and is supposed to work in cooperation with AFEDEM to execute the work, which seems to have been delayed.

Safeguarding Minerals. There are risks of theft posed to miners and *negociants* in and near the sites. There are reports of mineral theft occurring on roads in the evenings due to the long distance which must be covered by foot or by motorbike between locations such as Numbi and the nearest trading center. The absence of CdNs also exposes miners and *negociants* to risk of theft, as materials and money exchange hands in private homes, often in the absence of security agents.

3.3.2 IMPLEMENTING TRACEABILITY AND DUE DILIGENCE SYSTEMS AT SCALE

iTSCi

In Nyabibwe, an association of *negociants* described the iTSCi system as follows:

“At the mine sites, SAESSCAM puts the mining tag on the bag [of minerals] in the presence of the administration of mines, but at the negotiant’s [house], which is also their place of business, it is the administration of mines who affixes the negotiant tag to the minerals and SEASSCAM who monitors the process.”

Similar to the situation in Rubaya, the fact that this is occurring at the private residence of the *negociants* in Nyabibwe and Nzibira presents a number of problems. First, the *negociant*’s homes are dispersed and there are only a few SAESSCAM and Administration of Mines agents available, thus consistent monitoring by the SAESSCAM agent is not possible. This opens up the possibility of some tagging occurring in the absence of officials, where it would be possible for *negociants* to illegally alter the weights of minerals in order to augment minerals coming from validated sites with those from unvalidated sites. The same association expressed disappointment in what they perceive to be unfulfilled promises by the iTSCi implementers:

“The system promised us a centre de negoce and the presence of mining police. There are certain promises never fulfilled. The system does not assist us in improving production. There is no activity linked to traceability... When there are untagged minerals, the traceability permits certain negociants to channel these [untagged] minerals.”

A *negociant* from the same region counters,

“The price is declining. I buy at \$6/kilogram and after I pay all the taxes, I sell at \$8/kilogram and at the end of the day with all of the work to treat the minerals, I profit very little. Sometimes it even occurs that we sell at the same price at which we purchased minerals from the miners.”

In areas such as Numbi and Lutunkulu, where the iTSCi system has not been completely implemented as planned, miners “continue to function in a grey zone between legality and illegality, making it very hard for local mining operators to get their minerals sold on the international market” (Cuvelier et al., 2014, pg. 2). There is a fair amount of confusion at mine sites of the purpose of various visits paid by outsiders. In some instances, the miners thought that these were official audits of iTSCi. Unfortunately, the lack of clarity about these visits has exacerbated the expectations of some miners:

“The whites have often come to the mines to visit us and ask us questions, but we don’t know from where they are coming.”

Key actors in the supply chain reported applying a variety of techniques to skirt the rules and procedures of the iTSCi system, including:

- For minerals originating from Kibotio and Techembek a, *negociants* explained that one way around the requirements of the iTSCi system is to transport minerals during the night from a these “red” sites to a nearby area where there are “green” validated sites. This contaminates the clean supply chain

often without those in charge of ensuring compliance knowing –this threatens the credibility of the whole process

- As previously cited, sometimes the tagging of materials occurs at the homes of *negociants* in the presence of SAESSCAM staff instead of tagging them at the mine site. In fact, SAESSCAM staff have assigned responsibility for tagging at the residences of *negociants*.
- SAESSCAM agents are accused in at least one location of delegating someone (a *negociant*) with a tag to do the ticketing at his home, a practice prohibited by the system.
- Paying SAESSCAM agents a set rate per kilo in locations where system is occurring to mix minerals from untagged sites into tagged minerals (e.g., Lutunkulu and Nzibira).

Several stakeholders interviewed support the introduction of new traceability system to encourage competition and thus improvements to the existing system.¹⁵ There are some *negociants* and government authorities who worry that, given the low awareness of the existing system among miners and other actors, a new system would create more confusion, introduce a new way for agents to demand illegal taxes, and create more work for the miners and *negociants* to navigate the system. Coordination between the systems and a focus on capacity building would therefore be necessary in order to avoid confusion, duplication of effort and abuse of weak spots and loopholes.

Composition, Capacity, and Role of Cooperatives

In several areas in South Kivu (Numbi, Lutunkulu, Nzibira, Nyabibwe), tensions were observed between existing cooperatives. According to government regulations, only one cooperative is officially permitted to mine at a site. There are areas where the authority to mine in a particular site is in dispute. For instance, in Nzibira and Lutunkulu, up until the recent past COMIDEA has been the sole cooperative engaged in artisanal mining in the region. However, in the past few months, a new cooperative, COOMIANGWE, led by the wife of the Mwami appeared, installed billboards with its name near mining sites, and is accused of intimidating COMIDEA cooperative members so that they leave COMIDEA in favor of COOMIANGWE. Several interviewees described the tactic employed by the cooperative COOMIANGWE as threatening or fear-provoking. One cooperative member explained the fear to stand up to COOMIANGWE: “We are afraid that COOMIANGWE, given its support by the Mwami, and he is behind all that is crushing us.”

There was also allusion to the fear of potential conflict should the tactics employed by COOMIANGWE continue, with some young men threatening to “take this to the hills” if necessary.¹⁶ Others shared that they were promised much-needed materials and support if they were to join this cooperative. One miner explained that miners are ready to work for the highest bidder: “We are like prostitutes. We are willing to work for whichever cooperative is the richest.” There are similar tensions between cooperatives and private mining companies/societies, such as the *Société minière de Kilomoto* (SOKIMO) and Banro, which are described below.

Some members of COOMIANGWE, in contrast, expressed appreciation for the cooperative, citing the role it plays in advocacy and technical support. In Nyamurale, one cooperative member explained that it

¹⁵ For example, during an interview with Division of Mines official in Nyabibwe center, the value of competition to improving systems was repeatedly raised.

¹⁶ This expression is a reference to taking up arms. A group of young men in Lutunkulu threatened to do this after the Mwami's wife installed a sign of her cooperative in an area claimed by rival cooperative.

is only lack of materials that is preventing the group from realizing the mineral potential of the mine sites, suggesting that they could “easily extract between 80 and 100 tons of gold” with the right equipment.¹⁷

There has been a proliferation of mining cooperatives since 2012 (PROMINES, 2014).¹⁸ Interviews with cooperative members and other informants suggest that these cooperatives do not necessarily operate in the best interest of the miners. In contrast, numerous stakeholders reported that rather than decisions being taken by the general assembly in transparent, documented circumstances, most decisions are taken by the cooperative leadership without going to a vote; alternatively, cooperative leaders use various forms of pressure to ensure that members vote a certain way. There is a perception, therefore, that they tend to serve primarily as a workforce for a private entrepreneur or influential individual (such as the chief’s wife).¹⁹ A member of the CPS observed that cooperatives are not really composed of miners themselves and that it is rather powerful individuals who initiate these cooperatives and not necessarily in order to advance the interests of miners.²⁰ This observation has been echoed elsewhere, including in a recent report on South Kivu: “Although some cooperatives have existed for a long time and serve miners’ interests, other cooperatives have been created for purely private reasons. They have not grown organically, but as a top-down creation resulting from central government policy” (Geenen and Radley, 2014).

Commensurate with the rise in the number of cooperatives is a rise in tensions between cooperatives, with the limits of their respective mining areas in debate. One miner in Numbi explained the relationship between miners and cooperatives, likening the cooperative to a business:

“We have our boss, who is the president of the cooperative. There must be at least one ton of minerals before he [our boss] will take the minerals to Bukavu with his vehicle. He only gives us a salary and our [food] ration at the end of each month. There are twenty of us and we produce about 300 kgs of coltan and cassiterite [in a month].”

The overlapping roles of cooperative members is succinctly defined by this miner in Nyabibwe: “The *negociants* are often members of the cooperative and also at the same time, they are often the property owner/owner to the mining rights.”

There are miners who value being a member of a cooperative and cite reasons such as increased order, access to credit, and assistance in the event of an accident. Other miners assert that the cooperatives either do nothing of value or offer very little in return for the membership fees and insist that the cooperatives should be providing more materials and technical support. To address tensions between cooperatives, the CPS suggested to the scoping team that the state reestablish its authority in these matters and clarify the boundaries between cooperatives. The role of the state in matters such as this is discussed in the next subsection.

¹⁷ It is not clear where this unrealistic figure comes from or during what period of time it refers to. There could be a role for CBRMT to help disseminate accurate information on production potential.

¹⁸ As of February 2014, there were 119 mining cooperatives nationally, with 59 of those in Katanga and 27 in South Kivu.

¹⁹ As pointed out by Cuvelier (2014, 23), this situation of cooperative capture by elites is not unique to South Kivu: “*mining cooperatives have often been instrumentalized by local strongmen seeking to gather a group of loyal supporters around them who respect their authority and who are prepared to defend their business interests around the mines.*” Large, powerful landowners hold interest in multiple mine sites. For example, the Mwangachuchu family not only own the majority of the carres in Rubaya, but they also have interest in Numbi mine sites (International Alert, 2010).

²⁰ South Kivu CPS extraordinary session held on January 31, 2015 in Bukavu.

Role of the State

Critiques of governmental mining authorities and related services (e.g., Mining Police, SAESSCAM, Division of Mines) took multiple forms. Government authorities themselves often decried the inadequacy of staffing coverage given their charge. They also pointed to the low, inconsistent wages they receive as a disincentive to meet this large workload, and the absence of technical equipment needed to fulfill their mandates. Agents also acknowledged the tensions between various authorities, which they attributed in part due to a lack of role clarity and an overlap in roles. Civil society actors, cooperative leadership, *negociants*, and miners all complained about the level of corruption of governmental authorities, particularly of the SAESSCAM agents, who were consistently accused of demanding illegal taxes, facilitating the illegal mixing of tagged and untagged minerals, and in some cases selling tags. Criticisms of these technical services are not new nor unique to South Kivu.²¹ In Nyabibwe and Nyamurale, some miners noted the absence of the Police des Mines in monitoring and enforcing the steps of the supply chain.

A newly established unit within the FARDC known as DEAGRI has been given a specific mandate to prevent armed groups from illegally exploiting minerals. There appears to be some confusion by miners, cooperatives, and other law enforcement units as to the specific role of DEAGRI vis-à-vis other agencies. The level of collaboration between these services and mining agencies differs, with SAESSCAM cooperating closely with DEAGRI and the Division of Mines collaborating with the Mining Police. The scoping team concluded there needs to be a clear definition of the roles of DEAGRI, the Mining Police, and the national police, and guidance regarding the ways in which they are to interface with the various governmental mining bodies. The *Comite Provincial of Suivi du Sud Kivu* would like DEAGRI to disengage from the mine sites in Numbi, as they are a department of FARDC, which is not an authorized mining actor.

Across all of the sites visited in South Kivu SAESSCAM agents were labeled as corrupt and unhelpful, with miners and members of cooperatives reporting that they receive little-to-no technical support from SAESSCAM agents, yet are routinely demanded to pay for their services. In at least one location, they stand accused of facilitating the mixing of minerals originating from sites that are not validated or certified with those from validating sites by charging *negociants* for the “service” of bagging and tagging their minerals.²² In Walungu, there were sites where SAESSCAM officials are accused of not providing a single official receipt for any of the “taxes” they receive. At an inspection point at the barrier of Nyamurale, a location where no taxes are supposed to be paid to any officials, several *negociants* and civil society members complained that they routinely are demanded to pay in order to be able to pass through the barrier. For those *negociants* or miners purchasing small amounts, some are opting to bypass this road altogether, either by taking a parallel road or by hiring a motorbike on small paths. In designated locations, state agents such as SAESSCAM are executing the traceability system. The challenge is to do monitor their services to ensure that the system is operating with integrity.

Interviews with SAESSCAM officials in the Walungu region revealed the inadequacy of current actors for controlling the flow of minerals. SAESSCAM agents acknowledged that they provide the necessary paperwork to miners to transport their minerals from non-validated sites to Bukavu.

²¹ In the 2010 PROMINES Study, Pact notes that CEEC and SAESSCAM are criticized for corruption, inadequate personnel coverage, lack of resources, and lack of technical knowledge.

²² The rate of .05 cents per kilo in this location was well known to *negociants*. This practice has been reported elsewhere, as reported in the Deutsche Welle in October 2014: “There have been cases of mine officials selling tags at \$20, which are used to label “dirty” tin as “conflict-free...mine officials earn only \$60 a month, so they are easy to bribe” (cited in Wolfe, 2015).

Mixing of Minerals

Multiple individuals explained the ease with which minerals from non-validated mine sites are mixed with those from validated sites. Although the minerals are weighed before they are washed, there is a certain percentage of the material that is rock or *deche*. This provides a margin of error wherein non-validated minerals can be introduced after the washing process; when the minerals are weighed again, the difference between the unwashed and washed minerals can simply be attributed to a high ratio of minerals to waste. This is particularly a risk at sites in close proximity, such as in the case of Numbi and Nyabibwe or Lutunkulu and Nzibira. The Scoping Mission Team was also told that there is a market for untagged minerals, but that they fetch a lower price than tagged materials. In interviews and in studies of mineral exports, it appears that a substantial portion of untagged minerals exit the DRC via Rwanda or Burundi (Global Witness, 2012). In Rwanda, they can also then be mixed into tagged minerals and then exported. Unfortunately, the consequences of such practices are borne by the miner at the unvalidated site, who is not only receiving a lower price per kilogram for his or her minerals, but whose community is also not benefiting from the social investments promised through mechanisms such as the “basket fund.” The basket fund is a community development fund established by the Ministry of Mines to redirect revenues generated from mining into community projects²³.

CPS concurred with the Scoping Mission Team’s recommendation regarding expanding traceability systems, noting that it is necessary to install a traceability system in Numbi and similar unvalidated locations and draw upon the benefits of the associated “basket fund” to address infrastructure challenges in the region, namely poor roads, inadequate water supplies, and inadequate transport systems for minerals.

Inconsistency in Fees/Taxes

Miners referred to a wide range of legal and illegal taxes and fees they are expected to pay. In some cases, even when the miners or *negociants* know the taxes are illegal, they are resigned to paying. In other cases, miners seemed unsure of which taxes were valid. The Scoping Mission reinforces findings from previous research, wherein “a whole range of governmental and non-governmental and militarized and non-militarized actors latch onto the mining sector in the hope of extorting taxes” (Geenen and Radley, 2014, pg. 8). The lack of clarity about the legal taxes and fees required by the Mining Code allows a space for fraudulent practices.²⁴ These varied from one site to another for the same services. Table 3.4 on the next page reflects the range of figures reportedly paid for services.

²³ The purpose of the fund is outlined in an Arrette Provinciale of December 19, 2013, which explains that the Basket Fund is to be managed by the Comite Provinciale de Suivi (CPS) and is to fund community infrastructure projects.

²⁴ Like many of the other challenges cited in this analysis of South Kivu artisanal mine sites, the issue of illegal taxation is not new nor bound to South Kivu (Mukasa and Buraye, 2009).

TABLE 3.4: ASM RELATED CHARGES AND FEES IN SOUTH KIVU²⁵

Fee/Tax	Actual Rate	Official Rate	Purpose	Payer	Receiver	Legality
Access to water	Variable	No official rate	Water for washing minerals-separating soil from minerals	Pit manager	Concession holder	Illegal
Bagging and tagging	\$.003/kg	No official rate	To mix minerals from unvalidated sites with those from validated sites	<i>Negociant</i>	SAESSCAM	Illegal
<i>Negociant</i> card	\$200	\$310 for cassiterite	Right to buy and sell minerals; \$250 for provincial taxes; \$60 for administrative fees	<i>Negociants</i>	Provincial Division of Mines	Tax is legal, but administrative fees are not.
Cooperative Membership Card	Variable (\$1–\$10)	Set by the leaders of the cooperatives	Indicates membership status for those in a cooperative	Miners	Cooperative leaders	Legal
Cooperative membership fees	Variable (10% of production; \$2/month)	Varies. Set by the statute of the cooperative	Can cover purchasing of materials, health support for miners, micro-credit	Miners	Cooperative leaders	Legal
Declaration	\$.3/kg to declare; or about \$100/month	Coltan and cassiterite \$.3/kg	To officially declare minerals and their source.	<i>Negociants</i>	SAESSCAM	Legal
Identity Card	\$10	\$10	Identification of miners	Miners	SAESSCAM	Legal
Inspection tax at road barrier	Variable	No official rate	To gain permission to pass through barrier.	<i>Negociants</i>	SAESSCAM	Illegal

²⁵ Sources: Actual rates based on reports from *negociants*, miners, cooperative members and government agents during interviews in Nyabibwe, Numbi and Walungu in January 2015. Official rates based on: Arretes interministaires 0349/cab/min/mines/01/2014; cab/min/mines/2014/149 of 18 August 2014; arrete provincial 015/003/gp/sk of January 5, 2015.

Fee/Tax	Actual Rate	Official Rate	Purpose	Payer	Receiver	Legality
Mining Card (<i>carte d'exploitation</i> or <i>carte de creuseur</i>)	\$15–\$35	\$14	\$10 for the provincial account \$3 for administrative fees for the provincial division of mines; \$1 for environmental protection	Miners	Division of Mines	Legal (if charged at rate of \$14)
Right to mine (<i>le salongo</i>)	1 day per week of production	All minerals produced on this day	Payment for the right to mine on land deemed to be owned by the Mwami	Miners	Mwami	Legal (informal)
Right to mine	1 day per week of production	All minerals produced on this day	Contribution to community development and payment for services rendered by village leaders	Miners	Village leaders	Legal (informal)
Right to mine (Lutunkulu)	10% of production	Unofficial		Miners	Mine pit owner	Illegal
Technical services	\$10/month/per miner	10\$ per month	Payment for services rendered by SAESSCAM		SAESSCAM	Illegal

In examining this table of fees and taxes-legal and illegal-it is clear that miners and *negociants* are being charged at multiple steps of the process by state and non-state actors seeking to profit from the minerals trade. Many miners interviewed were not clear which taxes and fees were legal; many *negociants* and cooperative members expressed a reluctant acceptance for the reality of these illegal fees. There is no clear and direct way at the moment for miners, *negociants* or their advocates to serve as whistle blowers. For example, a group of local authorities and civil society representatives complained about illegal taxation imposed by the Division of Mines, SAESSCAM, and the Mwami at the inspection point of the trading center junction near Nyamurale. They particularly expressed growing anger and resentment from *negociants* towards the Mwami. They suggested the introduction of an anonymous alert system to report on illegal taxation and other corrupt practices. In contrast, a Division of Mines representative in Numbi is alerting executives in his agency and CPS to the corrupt practices of state agencies he is witnessing in his post in Numbi. CPS affirms the significant risk posed by the minerals from Numbi, which are allegedly mixing with minerals from validated sites in locations such as Nyabibwe, undermining the integrity of the tagged minerals.

There is also inconsistent use and enforcement of these various cards and systems. As mentioned above, many miners don't have *cartes des creuseurs*. To avoid having to pay for the card, miners or traders sometimes make internal arrangements so that multiple people can mine or sell using a card intended for one individual. This is a risk, as it means there is not a systematic way of identifying miners.

3.3.3 CUSTOMARY AND STATUTORY TENURE ARRANGEMENTS

Land Use Arrangements

In Numbi, herders and farmers have designated areas under customary arrangements, but there are tensions. For example, farmers indicate that they do not have adequate land for cultivation, implying that herders have better access to land. In certain locations the sites that have the highest mineral concentration happen to be in areas designated for herders. In some situations there have been agreements reached for mining activities to halt in favor of other land use activities. At one site in Numbi (Fungamwaka), there was an agreement reached between miners and property owners and in other cases (e.g., Koweit 2), property owners signed agreements with miners through cooperatives. Another arrangement involves landowners effectively renting the rights to mine a particular *colline* (hill). The prices quoted range from \$5,000 to \$20,000 per year. This payment is referred to as a *gaurantie* and is used in locations such as Mungwe in Numbi. On a positive note, this security of tenure feeds into people investing in land. The challenge is for those exploiting or those managing exploitation to respect the established customary mining limits. In some sites the property owner of a particular *colline* pays miners a salary in exchange for their labor and the minerals they extract. At Biriki, for example, miners are paid \$50 per month for their work. In the Walungu area, there were no legal contracts between cooperatives and property owners.

Some of the artisanal mining areas in Lutunkulu are officially leased to Banro, which has indicated an interest in negotiating with mining cooperatives to find a solution for the exploitation of the 3Ts in Lutunkulu sites. In Nyabibwe, there is an ownership dispute between Canadian mining company Shamika Resources, which signed an exploration permit in Kalimbi in 2007 with several local stakeholders, including artisanal miners, a mining cooperative, and the Provincial Minister of Mines (IPIS, 2013).

Customary Rights

In the Walungu region, there is rising tension between the Mwami, his wife (who is president of the newly formed COOMIANGWE cooperative), older cooperatives, *negociants*, miners, and members of civil society. This is in part attributable to the interpretation of customary rights being employed by the Mwami, which extends the ownership of the land to include both the sub-surface and surface rights. Tensions between customary law and modern property law are not unusual in areas such as Walungu,

where customary law holds strong authority (IPIS, 2012a, p. 13). In the 2002 Mining Code, mining rights supersede land rights and the role of customary rights are inadequately recognized (International Alert, 2010, pp. 24–25). One way in which customary authorities have benefitted from the artisanal mining that falls within their territory is through the practice of allocating the minerals exploited from one-to-two days per week of mining to the Mwami or to the village headman. During these days, the chief or village leader hand selects the miners who will exploit that particular day and these workers hand over all of their minerals to the leader. The expectation is that this money will in turn be used to deliver services to community members; however, this is unregulated. In some sites, the mining pits fall under the private ownership of the Mwami, which are being appropriated by the Mwami in locations such as Nyamurale, Lutunkulu, and Nzibira.

3.3.4 SPECIFIC ROLES, CONTRIBUTIONS, IMPACTS, AND CONSTRAINTS THAT MEN, WOMEN, AND YOUTH EXPERIENCE IN THE ASM SECTOR

Role of Women

Interviews with women miners, *negociants*, and civil society members revealed the roles, contributions, and constraints faced by women and young girls in artisanal mining areas. Across the sites—validated or otherwise—there was frequent reference to the absence of pregnant women and children in mining sites. In fact, when asked about traceability and due diligence systems, the three most-frequently cited descriptions were mine sites free of pregnant women, children, and fraud. Unfortunately, in a few cases, there was either an accidental or a deliberate misinterpretation of the mining code. In one case a DEAGRI official in Numbi fervently defended his perspective that the law prohibits *all* women on mine sites. In Nyabibwe, in stark contrast to Numbi, where women are largely excluded from mining, women serve as *negociants*, transporters and members of cooperatives. There was a call from some male members of state agencies and community organizations to actively discourage women from working in any role in the mines, suggesting that to minimize the exposure for women to heavy labor, they should be oriented towards other activities, such as agriculture, for example. Considering women perform quite heavy labor outside of the mining sector (e.g., transporting water and firewood long distances) the basis for this discouragement may be more cultural in nature than based on actual differences in capacity between men and women.

Youth

Actors involved in protecting or defending the human rights of women and youth include: the *Coopérative Artisanaux Miniers du Congo* (Congo Artisanal Mining Cooperative [CDM]) and the NGO War Child in the Nzibira/Lutunkulu area. In all locations, parents, miners, school officials expressed concern about low school attendance rates among boys and girls who seem to favor mining to school. Interviews with some women miners in Nzibira indicated that the choice to attend school is not always up to the children or the parents—it is often the outcome of economic circumstances in which parents cannot afford to send all of their children to school and/or children of single-parent homes who accompany their parents to mine sites in the absence of another parent for childcare; or children who may mine in addition to going to school in order to help pay for school fees. If mining was not an option, they would do something else instead, perhaps something “worse” such as banditry.

4.0 IMPLICATIONS

The implications of the Scoping Mission team’s findings are organized below under the four themes identified in section 1.1.2: *Scaling Up; Improving Existing Systems; Land Tenure and Access Rights;* and *Gender and Youth*. Within this overarching structure, the constraints identified in this report broadly reflect those identified in the Minerals Overlay of the USAID Land Tenure and Property Rights Matrix, namely resource conflict and displacement, weak governance, insecure tenure and property rights, inequitable access to land and natural resources, poorly performing (minerals) markets, and unsustainable natural resources management and biodiversity loss. Similarly, the suggested interventions mirror those categorized in the matrix: institutions and governance; legal and regulatory framework; rights awareness and empowerment; conflict and dispute resolution; restitution, redistribution, and consolidation; rights delivery and administration; and resource use management.

4.1 SCALING UP

There are several constraints to the scaling of traceability systems:

Minerals Markets Distortions. One of the main financial constraints to scaling up in North Kivu at the moment relates to the inability of SMB to pay for all the production from its concession in Masisi Territory in a timely manner. Unless there are guarantees that all production will be paid for on time, it is unlikely that production of minerals will be maximized (i.e. through greater investment of technology, capital or labor), or that all coltan will be sold through legal channels. This situation is not a symptom of broader regional and global markets for minerals, but is a distortion resulting from the particular contract between SMB and COOPERAMMA. If SMB cannot fulfill the contract, other *comptoirs* should be permitted to buy the balance of mineral production. In South Kivu, the market would benefit increasing the number of *fonderies/comptoirs* of minerals and from increase awareness raising for miners of the market value of their minerals.

Infrastructure constraints. Poor road and washing station infrastructure could pose a constraint to increasing production and profitability in some mines around Rubaya and Numbi. Given the significant flows of revenue from mining in the area, the poor state of the roads represents a broader issue of weak governance. Taxes from the mineral sector are not being allocated by the state for the provision and maintenance of adequate transportation infrastructure around the mining sites. Taxes paid are flowing to national coffers but not necessarily returned to provincial level and the state is not maintaining the roads.

Institutional constraints. In North Kivu, the technical capacity of COOPERAMMA also limits the extent to which miners can increase production without increasing the physical risks to miners’ safety. Improved technical information relating to soil types, slope data, and other factors affecting the physical stability of the mining areas could enable COOPERAMMA to guide pit managers to scale up production safely. Moreover, access to water supplies could allow for quicker excavation and washing of materials. There is a widespread perception that COOPERAMMA strongly discourages miners from joining other organizations, such as credit institutions or professional associations. This acts as an obstacle to potential improvements in the income, and the skill base, of miners, transporters, and other actors in the mineral sector in Rubaya. Similarly, in South Kivu, the technical and operational capacity of cooperatives is quite limited, with many existing primarily as a conduit for the purchase of minerals rather than a true member-based organization advocating for the interests of miners. Another significant institutional constraint identified in South Kivu is that of some SAESSCAM and Division of Mines staff who illegally tax for services in order to compensate for the lack of income they purportedly receive from the state. Although

this practice may be understandable based on the need for these agents to meet the needs of their families, it undermines the role of government authority in the sector. Furthermore, the cost of these incurred expenses are then often absorbed by the miners, as the price for their minerals at the source declines as a result of the *negociant* taking into account the fees/illegal taxes.

Capacity to manage an additional traceability system. There is a potential for confusion and overtaxing capacity of state agents with the addition of a new traceability system in Territories or Provinces where there is already an existing traceability system in place. The mining agents and negociants expressed concern that a new system could be confusing if there were different procedures to follow depending on the system in place. While this could be a legitimate concern, there is also the possibility that this is a reaction to proposed change and it may reflect the fact that some SAESSCAM and Division of Mines agents feel overstretched as is, for instance, spreading out to monitor tagging processes at the homes of many negociants or monitoring the bagging and tagging process at multiple mine sites.

Market constraints related to weak governance of cooperatives and state institutions. While cooperatives and state agencies such as SAESSCAM in theory provide various forms of services and support for miners, in practice miners receive very little in the way of technical support services. In practice, the experiences of individual miners are governed more by their relationships with pit manager or pit owners, than by their membership in a cooperative or their ownership of a *carte de creuseur*. This includes lack of information regarding the local, regional and global market price of minerals. Lack of information about the marketplace can result in real or perceived exploitation of miners. In some cases, *negociants* are accused of actively withholding information; in other scenarios, miners distrust the *negociants* and don't believe that the *negociants* have to incur significant costs in order to sell (particularly untagged) minerals. There is also a perception that the cost of the iTSCi system is being transferred to the *negociants* and the miners themselves, in the form of reduced prices for tagged minerals compared to the pre-iTSCi period. In reality, tagged material gets a lower price than in the past, but untagged material gets an even lower price.

4.2 IMPROVING EXISTING SYSTEMS

The findings of the scoping mission suggest several weaknesses in the credibility, efficacy, transparency and sustainability of the existing traceability system, as outlined below.

4.2.1 CREDIBILITY

There are unmonitored components of the iTSCi chain of custody. As reported by stakeholder and observed directly by scoping mission team members, coltan is often washed and dried at the homes of miners or pit managers before being bagged and tagged. This highly decentralized and completely unmonitored stage of the process is a loophole through which coltan from red-listed sites could easily be introduced into the traceability system. For example, as documented in the mid-2014 CTC audit of the SMB mines, it is unclear whether coltan produced at unvalidated sites near Rubaya, particularly Muvumbuku and “Bayo’s site,” is sold to SMB through the iTSCi certification system.

Although a tally is taken of the number of sacks leaving the mining site for drying and separation, and is presumably reconciled with the number of sacks arriving for bagging and tagging, there are several ways in which miners could find ways around this system. For example, the people taking the tally of bags leaving the pit (e.g., stage 3 of the traceability schematic, Figure 2.2.) could be bribed to increase the count; or some bags of mineralized material from the green-lit sites could be taken back up to the mine site in secret (i.e. during the night) and made to appear to be freshly-dug material; so that un-certified coltan could be taken to Rubaya in its place.

As noted above, mining sites are not fenced or otherwise heavily secured. In particular, large mines such as Luwowo are very difficult to secure, even using guards, as it is difficult to get a view of the entire site and there is a huge (unfenced) boundary around the site to patrol. In conjunction with the possibility that security guards can be bribed to allow access to the mine after-hours, this may permit some miners to secretly smuggle coltan out of the site, or alternatively to bring mineralized material from red-list sites to SMB mines to put it into the certification system

The great number of *negociants* purchasing coltan is also a challenge to traceability, as this means that the purchase and transport of the coltan is decentralized. Due to number of steps involved there may be several potential opportunities for fraud. For example, if iTSCi tags were to be available for sale on the black market (as cited by the Group of Experts, 2015), it is possible that *negociants* could bag coltan from red-listed sites and re-tag them as green-listed material (this would require some corruption of mining agents in order to ensure that the fraud is not discovered due to the numbering system on the tags).

In particular, Koyi/Nkoy mine in Rubaya, Masisi Territory and the mine sites in the Nzibira area of South Kivu appears to be a weak point in the traceability process, given the lack of supervision by mining agents. It is possible that minerals from red-listed sites could enter into the certification chain under the pretense that they originated from Koyi or Nzibira. The lack of direct on-site management by COOPERAMMA personnel is also problematic from multiple perspectives. A completely unsupervised mine is an even greater risk for fraud. Necessary interventions at the Koyi mine would come under the institutions and governance category of the LTPR matrix, but are also linked to rights awareness and empowerment, as miners who are members of COOPERAMMA should receive the associated support and services. Furthermore, attempts to improve the governance of this mine should also proceed from a conflict and dispute resolution perspective, in order to avoid exacerbating existing tensions.

4.2.2 EFFICACY

From a purely logistical viewpoint, it would not be difficult to ensure that all coltan mined at the Rubaya green-listed sites is purchased directly by SMB, without the intervention of any middlemen. However, the complex system, which includes both small-scale and large-scale *negociants*, is a result of the long-standing artisanal system of production, which predates the purchase of the mines by SMB. It may therefore be extremely difficult to reform the system because of the vested economic interests of the *negociants* and various other actors. In addition, the limited availability of liquid capital may restrict SMB's capacity to buy all the production outright at the mining sites. Nevertheless, some measure of simplification and centralization of the system would seem to be possible, and would limit the number of opportunities for fraud. Such interventions would come under the institutions and governance component of the LTPR matrix, as well as the legal and regulatory framework (as structural changes to mining laws and regulations may be necessary to enforce the desired changes).

As noted, SMB is not always able to purchase all the coltan production from the Rubaya mines in a timely way. The resulting delays in payments are likely to be a motivation for fraud and smuggling, as *negociants*, pit-owners and other middle-level figures in the mining industry may be tempted to sell to other actors outside of the iTSCi traceability system, in order to receive payment more quickly. However, debts and delays in payments should be understood in a broader context of the micro-economy of mining, characterized by, a “complex web of relationships... whereby mining bosses are pre-financed by ‘negotiants’, or buyers, to conduct pre-production exploration work (such as tunnel construction). The mining bosses must then repay this debt once production begins” (Radley and Rothenberg, 2014, page 53).

SMB plans to construct a smaller number of (larger) washing stations that are more easily monitored, in order to reduce the costs of production and reducing risks of fraud. However, in order to reduce the risks of fraud, adequate space will have to be provided for drying as well. This might be difficult to achieve at

mining sites like Luwowo, here there is little remaining space. As noted below, there are several other stages in the traceability process that are vulnerable to fraud, and hence the improvement of washing stations will not, by itself, necessarily improve traceability.

In South Kivu miners and *negociants* lamented the absence of materials which were hindering productivity. In some instances mines had been inactive for over a year due to flooding and an inability of the miners to vacate the water.

4.2.3 TRANSPARENCY

Field research indicated that accidents, sometimes very serious ones, are not uncommon in the mines. It is not clear that official reports on specific accidents (e.g. reports by iTSCi or government agencies) are systematically shared with miners. Information on accidents (causes, impacts, and recommendations for prevention of future accidents) should be provided to miners in a transparent and timely way, for example through COOPERAMMA or SAESSCAM. A system of regular safety assessments conducted by trained personnel, linked to decision-making and regulatory mechanisms regarding modes of production, would reduce the risks of accidents. This could include aspects of institutional and governance improvement, as well as changes to the legal and regulatory framework, to ensure that it can be operationalized and enforced. Transparency could also be enhanced by incident reports by iTSCi, the confidential version of which are not shared with the GDRC or made publically available

It was reported that the number of people injured or killed in accidents is frequently under-reported, and that relatives or miners calling attention to discrepancies may be intimidated. A widow, for example, relayed a story of a landslide which killed her son and injured his friend. While at the hospital with his injuries, the friend allegedly received threats in reaction to his insistence that miners-including his friend-had been buried in the landslide. Eventually, the family of the injured victim fled the area for fear of reprisal for exposing the true consequences of the landslide. The woman whose son was lost indicated that she has yet to receive any acknowledgement that her son was killed in the mine and that she did not receive any compensation for his death nor any assistance in covering his funeral expense. Such situations have been documented by other research as well (Radley and Rothenberg, 2014). The perception of the widow is that it is the pit manager/boss who has a vested interest in hiding the true extent of a death toll in a landslide for fear of being forced to pay \$100 to each victim's family. According to various sources, several institutions, including cooperatives and the mining police, may collude to restrict information about the number of fatalities. Other researchers have also found a "high level of collusion between different authorities and powers in suppressing and controlling the miners", who can be barred from accessing the mines if they speak out (Radley and Rothenberg, 2014). Interventions to address these problems could encompass rights awareness-raising and empowerment of miners and their families; as well as changes to the legal and regulatory framework.

In the DRC, cellphones are now relatively affordable and popular. Mining personnel, who earn more than the average rural Congolese citizen, are very likely to possess a cellphone. It is possible that simple SMS (text message) technology and affordable computer software and hardware could be used to create a system to monitor and record the presence of individual miners on the mining sites. For example, each miner could use his mobile phone to send an SMS, or alternatively simply "beep" (i.e., call without connecting) a centralized number. The centralized number would be connected to a database of personnel registered by COOPERAMMA, which would automatically register them as present at the mining site. A slightly more sophisticated system could be used to link each miner to a particular pit or area within the mining zone.

This system could be operated, or the information automatically shared with, independent organizations, in order to reduce the risk of the system being abused. In the case of an accident, a list of all personnel on site could quickly be shared with emergency personnel and could be used in the rescue of miners trapped

underground. If there are fatalities, the list could be used to ensure that all the dead are acknowledged and compensation is paid.

4.2.4 SUSTAINABILITY

Weak cooperative governance: In North Kivu COOPERAMMA plays a key role in the production of minerals in Masisi. Its internal decision-making systems do not appear to be strong, and could be strengthened in order to make the cooperative more responsive to the needs and demands of its members. Similarly in In South Kivu the weak cooperative governance in some instances and co-optation of the cooperative notion in other instances is undermining the credibility and sustainability of cooperatives. A possible first step would be to put in place a system for systematically informing miners about governance structures and processes related to governance (e.g., ensuring that all members are aware of the dates and times of cooperative meetings, voting procedures, etc.) as well as the results of votes, decisions made by cooperative management, and other important elements.

Also, in North Kivu, miners working directly for SMB in the D2 Bibatama mine do not have written contracts. While certain benefits and other details have been discussed in meetings and documented through meeting minutes, it would be preferable to have each miner working under a contract with all arrangements for medical assistance, compensation in the event of an accident, and other issues clearly documented. Of course, such arrangements should at a minimum meet the DRC's legal standards and should preferably reflect best practices in the African mining sector. The required interventions would therefore include rights awareness-raising and empowerment of miners and their families; as well as changes to the regulatory framework (either at the SMB corporate level, or at the level of Provincial laws and regulations). Legal standards and clear working conditions would also benefit South Kivu, where landowners sometimes engage miners to work in exchange for a percentage of the minerals exploited or in places like Nyabibwe where miners are paid a fixed wage. Further, there are systems that may need to be curtailed, such as the pre-financing of production by operators who then use violent means to ensure debt repayment.

4.3 LAND TENURE AND ACCESS RIGHTS

4.3.1 NORTH KIVU

Insecure tenure and property rights: Although Koyi/Nkoy mine is part of the SMB concession and comes under the contract with COOPERAMMA, access to Koyi/Nkoy mine is reportedly controlled by local customary landowners, rather than primarily by COOPERAMMA. In practice, COOPERAMMA is not fully enforcing its own legal rights to manage the mine, due to a latent conflict between SMB and local people over rights to the land and minerals. Because the minerals are ultimately under the ownership of the Congolese state, which has granted SMB a concession to exploit them, this is in the final analysis a latent conflict between the statutory and customary rights systems in the DRC. This results in local people, particularly relatives of the landowners, allegedly benefitting from the most profitable work within the mine. Those who are not from the local area are able only to work in the poorly paid positions (such as in the mineral washing area) and express a general sense of being discriminated against within the organization of the activities at the mine.

COOPERAMMA does not appear to have a strong presence at the Koyi/Nkoy mine, but is nevertheless the institution with responsibility for managing mineral production, according to its contract with SMB. At the moment, the customary claims of the local landowning families are being played out at the level of individual miners. From a perspective of equity, as well as management of potential disputes, COOPERAMMA may wish to consider mediating in the relationship between the customary claims and the formal exploitation rights of SMB. For example, rather than imbalances in payment and labor roles

being borne by individual miners, COOPERAMMA could ensure that all members have equal access to work in the mine, and come to some arrangement with the customary landowners. However, in the medium term, it is the responsibility of the DRC government to resolve the latent conflict between custom and statute over minerals in the area.

4.3.2 SOUTH KIVU

Insecure tenure and property rights: The standstill between Banro, artisanal miners and the Ministry of Mines is limiting the level of exploitation in areas such as Lutunkulu. This is overlaid with the complex role of the Mwami and his wife in the struggle between the cooperative COOMIANGWE and its rival, COMIDEA, which risks to escalate if the tactics utilized by the cooperative are perceived as imposing and undermining the authority of existing cooperatives in Nzibira and Lutunkulu. Although the dispute is at one level removed from the actual mineral resources (i.e., the struggle is over membership, not over areas of the concession) it represents a conflict over natural resources. This conflict should be managed in order to avoid disruption of production and/or violence.

According to the Mining Code, artisanal mining is to occur in specific areas-known as a *zone d'exploitation artisanale*, or ZEA, zoned for that purpose (IPIS, 2012a, p. 12). In areas such as Walungu, these are not yet officially established and their absence is contributing to confusion over property rights. In fact, throughout the DRC most artisanal mining is not occurring on official ZEAs. As pointed out by Pact International, even in the few locations in the country where ZEA's are established, they have little in the way of tenure security, with a risk of being shut down should industrial mining become a viable option (PACT, 2010, pp. 52–53). The rights of artisanal miners to exploit minerals in the ZEA therefore remain extremely insecure.

4.4 GENDER AND YOUTH

4.4.1 ROLES AND CONTRIBUTIONS

The Scoping Mission found that women play a wide variety of roles in the mining sector. At Rubaya in North Kivu and in Numbi in South Kivu, the women appeared to have a more indirect role, selling food and beverages to miners. Women are negociants, members of cooperatives, and miners in Nyabibwe, while in Numbi and Walungu, there appeared to be cultural beliefs and taboos-as well as misunderstandings of the laws regarding women's roles in mining-which limited the role of women played in mine sites. There are opportunities to support the women who want to engage in mining so that they can do equitably and without fear for their security.

It was observed that local people, including some children, worked at informal washing stations downstream from the official mine site washing stations, in order to reclaim coltan residue from streams originating at the mine sites. While these informal *laveries* do not appear to be as dangerous as those located in the mine sites, there may in some cases be risks of flash floods or landslides. If such sites are located within the mining concession, SMB and/or COOPERAMMA, in conjunction with the local administration, could attempt to raise awareness of possible risks and encourage children to attend school rather than work in these *laveries*. Guided by the LTPR matrix, interventions could include some measure of economic empowerment in order to provide an incentive for children to leave these activities.

4.4.2 IMPACTS AND CONSTRAINTS

As noted above, accidents in the mines appear to be under-reported and compensation is not always paid. There is also a broader question of the amount and nature of compensation for injury or death, in a context where most miners work without any contract. Women and children are amongst the direct or

indirect beneficiaries of compensation payments for injury or death. In the current context, where a framework for compensation is lacking, there are few benchmarks that can be used to assess an “equitable” amount of compensation. This is therefore not only an issue of health and safety, but also a symptom of the broader issue of weak governance within the mining sector and within cooperative structures more particularly. As formalization of the artisanal and small-scale mining sector progresses through the implementation of iTSCi and other systems, efforts should also be made to formalize the protection and compensation mechanisms available to miners and their dependents.

5.0 RECOMMENDATIONS

The field scoping exercises represent a unique opportunity to build a stronger rapport and understanding between government mining officials and civil society using an active, participatory learning experience. The result contributed to a stronger understanding of the challenges associated with traceability and formalization, as well as how clear, secure and enforceable tenure and rights are fundamental to strengthening the legal chain of custody, and ending ambiguous or open-access tenure arrangements. Unfortunately, the fact that officials and potentially *negociants* are benefiting from the status quo, will make reforming the system quite challenging. Reform will require incentives and as well as enforcement. The following recommendations were developed by the scoping mission teams and through roundtable discussions with CPS members.

5.1 SCALING UP

Opportunities, constraints, and capacity to scale up validation, traceability and due diligence in support of conflict-free mineral supply chains, including both 3Ts and gold;

- **Prioritize the validation process of sites in close proximity to existing validated sites** (e.g., Numbi, Lutunkulu in South Kivu) to reduce risk of un-certified minerals from entering the commodity chain of certified minerals that are bagged and tagged in nearby locations.
- **Support the introduction of new/alternative traceability systems** to encourage competition and thus improvements to the existing system. Any new system should augment geographical coverage of mining sites, rather than taking over sites currently covered through iTSCi. However, any new system would have to be introduced through an effective public information campaign and capacity-building program. Stakeholders need to better understand the distinctions and advantages of what an additional traceability and due diligence assurance system, such as BSP/GeoTraceability, offers and how it differs from the existing iTSCi system. Government agents from SAESSCAM, Divisions des Mines and CEEC also need to understand the procedural differences in data collection and dissemination, while cooperatives and civil society partners will require capacity building in order to effectively undertake local monitoring and reporting.
- **Research the potential for integrating geologic and mine safety assessments into the validation process** to determine mining methods appropriate for the terrain which minimize risks to the miner and surrounding communities. The assessment could also determine risk for landslides, and other hazards associated with poor mine shaft construction. In fact, assessments of mining conditions (risk of landslides, mine safety conditions) could represent the next stage of due diligence necessary to scale up traceability and conflict free certification in order to expand beyond simply looking at financing for illegal armed groups.
- **Minimize potential confusion and overtaxing of state agents** that could be created through the introduction of another traceability system in locations where there is an existing system. This could be done either by prioritizing mine sites where there is not an existing system, but which are near active sites. It would be important to assess the capacity of the affected SAESSCAM and Division of Mines agents to ensure that they could adequately carry out the functions of a new system while simultaneously meeting the demands of an existing system. Ideally new system could address some of the gaps in the current system while realistically still having the necessary oversight of state agents.

5.2 IMPROVING EXISTING SYSTEMS

Opportunities and constraints related to the efficacy, cost, transparency, credibility, and sustainability of implementing traceability and due diligence systems at scale for the 3Ts.

- **Increase awareness of audits.** In order to raise awareness of the various risks, opportunities, strengths, and weaknesses of the mining sector in Rubaya, as well as the specific responsibilities of particular institutions, efforts could be made to educate miners and cooperatives about the purpose and process of audits publicize the results of official evaluations and audits. The dissemination of such reports could target not only local decision makers, but also mine workers themselves, who risk their health and safety to produce coltan.
- **Increase transparency and reduce risk of fraud** by: a) increasing awareness of traceability and OECD due diligence requirements and rights; b) accelerating the construction of *Centres des Negoces*; c) ensuring that minerals are tagged before they leave the mine sites; d) providing adequate washing and drying facilities in monitored areas of the mine sites; and e) enforcing legal prohibitions on misuse of tags and other fraudulent activities. If such aspects are enforced, once they are bagged and tagged, minerals are, in theory, “in the system” and secure.
- **Strengthen the role of cooperatives in supporting miners.** Encourage the cooperatives to truly represent the needs and interest of their members. This could include serving functions that would be akin to a credit union: a) providing necessary equipment; b) organizing washing, drying, and separation stations closer to mine sites; c) engaging geologists to help determine mining methods appropriate for the terrain which minimize risks to the miners; and d) advocating for the rights of miners injured in accidents, and the relatives of those killed.
- **Introduce a cellphone-based multi-use information management system.** This system, based on a “crowd seeding” model (which works through pre-selected reporters) and using the freely available software (such as Frontline SMS) could be connected to a central database that produces regular automated analysis and reports. Flows of information could be two-way so that it served an information dissemination function as well as a monitoring one. Such a system could represent an information exchange on a number of functions, including: sharing updates on incidents related to corruption, taxes/fees, security, health and safety, market information, productivity, and human rights violations. While the system could be independent of existing institutions (to minimize tampering and/or politicization of its outputs), it could be linked to institutions with oversight responsibilities, such as SAESSCAM and the CPS.²⁶
- **Increase awareness of legal ASM related taxes and fees.** Support an awareness campaign in combination with the above SMS-based monitoring and alert system so affected actors are aware of the required, legal taxes, and their function, and have access to information on the actors involved, timing and frequency that such taxes and fees can legally be levied. Through systems such as the SMS-based one recommended, establish a whistle-blowing system to monitor illegal taxation.

5.3 LAND TENURE AND ACCESS RIGHTS

Customary and statutory tenure arrangements that govern access, use, and management (enforcement) of land and minerals.

²⁶ Precedents exist in the form of the discontinued pilot project, named *Voix des Kivus* (Voice of the Kivus) (der Windt and Humpries, 2012), though there would be significant differences in the context and design of an SMS-based system for the mining sector.

- **Strengthen existing ASM informal governance systems.** Identify local land governance arrangements between landowners, concessionaires and miners, and support them through capacity-building and facilitation for dispute resolution as well as interventions based on interpretation, improvement, and enforcement of the statutory legal framework (including through advocacy for particular components in the land law reform process).
- **Assist the Ministry of Mines in reaching an agreement with Banro** in S. Kivu over the artisanal areas in question. Given Banro's increasing interest in productively engaging with ASM, CBRMT has an opportunity to facilitate this agreement and establish an agreement and possibly fund a pilot project that advances the needs of both artisanal miners and Banro.
- **Support a dialogue between the Mwami and the cooperatives in Nzibira, S. Kivu.** To help diffuse tensions and explore opportunities for agreement between the Mwami, COOMIANGWE and existing cooperatives, support a civil society organization in convening a dialogue between key actors.
- **Advocate for the expansion of ZEAs** and formalize some areas currently being exploited through artisanal methods. Encourage Ministry of Mines to convert titles that are currently held in name only but haven't been explored into ZEAs, and provide a minimum duration for ZEA in order to improve the security of ASM rights to minerals.

5.4 GENDER AND YOUTH

Specific roles, contributions, impacts, and constraints that men, women, and youth experience in the ASM sector.

- **Support efforts to assess and improve mining safety.** A system of regular safety assessments conducted by trained personnel, linked to decision-making and regulatory mechanisms regarding modes of production, would reduce the risks of accidents. The reports could also be used to help guide the development of health and safety training modules and/or be used as case studies to assist cooperatives protect their members.
- **Strengthen role of civil society.** Encourage and build the capacity of individuals affected by accidents (e.g., widows) to advocate for the appropriate level of support from following accidents. Such organizations should, for example, transparently acknowledge each incident and its actual toll in terms of deaths and injuries of miners, officially acknowledge the identity of each victim and contact their families, provide assistance with funeral expenses, and provide other forms of compensation to the family.
- **Advocate for an employee contract as a legal requirement for industrial mining societies.** The provision of this type of contract could help protect the rights of the miners in terms of payment and insurance related protection.
- **Support local actors in raising awareness amongst families and children about mining-related risks.** Raise awareness of possible risks and encourage children to attend school rather than work in these *laveries*.
- **Increase understanding by key actors of the role women can and do play in artisanal mining.** Raise awareness about the law pertaining to women at mine sites to reduce incidents of misinterpretation or misapplication of laws aimed at protecting *pregnant* women, which in some areas appear to be used to keep *all* women out of the mine site. Exchanges can be encouraged to connect women *negociants*, transporters and members of cooperatives with women miners to increase

awareness about the range of roles women play and to provide a forum for women to articulate common interests.

APPENDIX A: RESEARCH QUESTIONS

A. Questions for members of mining cooperatives:

1. Are you a member of a mining cooperative?
 - a. If yes, why? If no, why not?
2. Are there advantages to working in a cooperative?
3. Are there challenges to working in a cooperative?
4. Do you know the traceability system? If yes, explain.
5. How can cooperatives play more of a role in the traceability system?
6. What do you think of the management of the cooperative?
7. Are there women who are members or leaders in the mining cooperatives?
8. In terms of governance of the cooperative (decision making, management of members), how could it be strengthened?
9. How do miners who are not originally from the area gain access to the mine sites to work? Can anyone buy a mining card and start to mine? Could outsiders/newcomers even own a site?
10. What are the advantages of officially registering a cooperative? What are the challenges of officially registering a cooperative?

B. Questions for diverse civil society organizations

11. How is the association connected to the mineral trade?
12. Do you know the traceability system? If yes, please explain.
13. How can associations be more implicated in the monitoring and verification processes of the traceability system?
14. Are there women who are members or leaders in the association?
15. Are there differences in the way in which security incidents are treated if women and/or youth are involved?

C. Questions for miners and other workers at the mine sites

Taxes

16. What are the taxes or fees you are obligated to pay according to Congolese law?
17. Do you know how these taxes or fees are utilized?
18. Have you paid other fees or taxes in 2014? If yes, explain.

19. Do these fees have an impact on your capacity to get your minerals to the market?
20. Do you have an official mining card? Explain.
21. Are there advantages to holding an official mining card? Explain.

Institutions and Security

22. What institutions or groups are based in the mining area on a permanent basis?
23. Which institutions visit the mining area on a punctual basis?
24. Are all of these institutions authorized to be in the mining area?
25. Have you noted mining incidents at the mine site itself or on any of mineral transport routes or incidents related to traceability in the past month?
 - a. If yes, did the police or other security agents respond to or follow up the incident?
26. What police or other security agents visited the mine site in the past month?
27. Are there differences between the way security incidents were handled in cases where the victims were youth or women and those involving men?

Traceability and Audits

28. What are the activities linked to traceability or mining certification in your area of work?
29. Do you play a role in the traceability system? Explain.
30. Do you know the name of the individual or organization who audits the mine to assure the system of certification works effectively?
31. What did the auditor do during his/her last visit to the mine site?
32. What is your opinion of the previous mining audit?
33. What are the impressions of others of the mining audit?
34. Did the audit/auditor take into account the particular concerns of women or youth in its audit?
35. Have you personally noted differences before and after the introduction of the traceability system?
36. Did the traceability system have impacts on community relations here? Please explain. Were the effects positive or negative?
37. How could the number of sites validated with an instituted system of traceability be augmented?
38. Was there any monitoring/follow up by CLS authorities after communication of a violation of the traceability system? If yes, what was done?
39. Is the monitoring and reporting system for incidents anonymous? Do you know any situations wherein the identity of a person who reported a violation was not protected?
40. How can the role of international organizations in traceability be reduced? How can the role of the governmental authorities in traceability be increased?
41. How can the CLS be more implicated in the monitoring and verification of the certification system?
42. Are all of the stakeholders aware of the system of certification?

43. If not, what level of information would be appropriate to share with them? What is the best way to inform them of this information?
44. In your opinion, what would be the best way to ensure that the traceability system is managed by Congolese agents and organizations?

Work Conditions

45. Have you ever lodged a complaint about your working conditions?
 - a. If yes, with whom did you lodge your complaint? What response did you receive? What happened after filing this complaint? Has this happened in the past month?
 - b. If no, do you know others who complained about work conditions?
46. Did your working conditions improve as a result of actions taken following this complaint?
47. Are working conditions similar for men, women, boys and girls? Explain any differences.
48. Did the auditors pose any questions about the roles, working conditions of men, women, girls and boys? If yes, what kinds of questions were posed?

Viability of Tickets

49. Have you ever noticed a damaged or inappropriately opened ticket?
 - a. If yes, what happened?
50. Did this happen in the past month?
51. What are the positive points and the negative points of the tagging system?

Local Population

52. Do mining activities have a negative impact on the customary rights and properties of the population?
53. If yes, was there any consultation with local communities before the installation of mining related infrastructure?
54. Did the local community ever receive indemnity following negative impacts on the property rights of the local population?
55. If no, is there a consultative process that exists in respect to property rights of the local population?
56. Does the local population benefit from mining?
57. Are the advantages and disadvantages of artisanal mining similar for men, women, boys and girls?

Property Rights

58. How Comment peut-on acquérir le droit de creuseur et contrôler un puit dans le zone minière?
59. Who is implicated in the process of attributing mining rights and control of mines?
60. Does this area have an official ZEA status? (ZEA= zone d'exploitation artisanale)?
61. Is this mining area situated in an industrial mining concession?
62. If yes, is there an accord or contract for artisanal access to the mine sites?
63. Is this mining area located in a national park or reserve?

64. Are there multiple individuals or companies who reclaim the rights to the land or minerals in this area?
65. Are there potential reasons why the government could close this mining area to mining? What kinds of reasons?
66. Do the activities in the mining zone have any negative impacts on customary rights or on the population, their land and their possessions? If so, are community members consulted in decisions that affect them?
67. Has the population ever received compensation for negative impacts?
68. How does the mining benefit the local population?
69. Does the concessionaire or land owner gain permission from the provincial governor to occupy a mining area or to institute mining related infrastructure?
70. When the price of minerals increases on the market, do you earn more money?

D. Questions Added in Rubaya for further inquiry

The following questions were added during the Rubaya mission based on insights gained during the first day of research:

1. What are the differences between official visits and audits?
2. What are the conditions of the agreement/arrangement between miners and pit owners/concessionaires?
3. How are mining accidents monitored?
4. Awareness about the traceability system. Why are a lot of miners unfamiliar with the traceability system?
5. Is there any initiative to improve the transportation of minerals to the washing stations?
6. Are miners aware of their rights?
7. How can one know whether there are minerals coming from red sites entering into the system?
8. SMB owns the mines and is also the buyer, so what role is there for *negociants*? Why do *negociants* exist in this system? Is there a role they play or could play in minimizing risk of fraud?
9. Has the training conducted by SAESSCAM on the importance of savings had an impact on the savings practices of miners?

APPENDIX B: REFERENCES

- Association pour le Développement des Initiatives Paysannes (ASSODIP) (2013) Les minerais de Masisi face au défi du Développement du Territoire. Goma: ASSODIP.*
- BGR/BMZ. (2012). In Focus: BGR support for mineral certification in the African Great Lakes Region. German Federal Ministry for Economic Cooperation and Development.
- Blore, Shawn (2014). The 97% Solution: Working with Producers to Responsibly Source Artisanal Gold from the Democratic Republic of the Congo. Tetra Tech ARD for USAID.
- Byemba, G. K. (2012). Exploitation minière industrielle versus exploitation minière artisanale au Sud-Kivu : Possibilités d'une cohabitation pacifique ? Bukavu: IPIS.
- Concorde, L. P. (2009). Analyse de Contexte du Territoire de Kalehe. Life & Peace Institute.
- Conflict Prevention and Peace Forum (2012). Analyzing the Impact of the Dodd-Frank Act on Congolese Livelihoods.
- Congo Rift Valley Institute/Usalama Project (2012) From CNDP to M23: The evolution of an armed movement in Eastern 2014.
- Cuvelier, J., Van Bockstael, S., Vlassenroot, K., and Iguma, C. (2014, November). Analyzing the Impact of the Dodd-Frank Act on Congolese Livelihoods. Social Science Research Council: Conflict Prevention and Peace Forum. https://s3.amazonaws.com/ssrc-cdn1/crmuploads/new_publication_3/%7B57858126-EF65-E411-9403-005056AB4B80%7D.pdf
- Der Windt, P, and Humphries, M. (2012) *Voix des Kivus: Reflections on a Crowdsourcing Approach to Conflict Event Data Gathering*. Discussion Paper, University of British Columbia.
- Enough Project (2014) Another Conflict-free Mining Project Launches in Eastern Congo. Blog posting, accessed at <http://www.enoughproject.org/blogs/another-conflict-free-mining-project-launches-eastern-congo-on-january-6th-2014>.
- Geenen, S. (2011). Relations and regulations in local gold trade networks in South-Kivu, Democratic Republic of Congo. *Journal of eastern African studies*, 5(3), 427-446.
- Geenen, S. and Radley, B. (2014) [In the Face of Reform: What Future for ASM in the Eastern DRC?](#) *Futures* 62 (2014) 58–66.
- Global Witness (May 2013). Putting principles into practice: Risks and opportunities for conflict-free sourcing in eastern Congo. Global Witness. <https://www.globalwitness.org/sites/default/files/library/Putting%20principles%20into%20practice.pdf>.
- Global Witness. (2012). Coming clean: how supply chain controls can stop Congo's mineral trade fuelling conflict.
- Group of Experts (2015) Final report of the Group of Experts on the Democratic Republic of the Congo. New York: UN Security Council.

- Hayes, Karen (2010). Implementing iTSCi on the ground: Tagging and Data Collection. PACT: Washington, D.C.
- International Alert. (2010). The role of the exploitation of natural resources in fuelling and prolonging crises in the Eastern DRC. London: International Alert.
- IPIS. (2012a). The formalisation of artisanal mining in the Democratic Republic of the Congo and Rwanda. Bogor, Indonesia: Center for International Forestry Research.
- IPIS (2012b) Exploitation minière industrielle versus exploitation minière artisanale au Sud-Kivu : Possibilités d'une cohabitation pacifique? Bukavu, DRC.
- IPIS (2013). 'Conflict Minerals' initiatives in DR Congo: Perceptions of local mining communities. Antwerp.
- iTSCi (2014a) Conflict free mines in the Kivu's continue to grow within iTSCi. Blog posting, accessed at https://www.itri.co.uk/index.php?option=com_zoo&task=item&item_id=3069&Itemid=177 on January 7th 2014.
- iTSCi (2014b) Status Report iTSCi North and South Kivu Field Operations January-June 2014.
- Jocelyn T.D. Kelly, A. K.-C. (2014). Resources and resourcefulness: Roles, opportunities and risks for women working at artisanal mines in South Kivu, DRC. Futures. Retrieved from <http://dx.doi.org/>
- Kibasomba, R. & Lombe, T.B (2011). Obstacles to Post Election Peace in Eastern DRC: Actors, Interests & Strategies. In M. Buregu, Understanding Obstacles to Peace: Actors, Interests & Strategies in Africa's Great Lakes Region. Ottawa, Canada: Fountain Publishers.
- Ministry of Mines. (2010, September 20). Arrete Ministeriel 0706: Mesures urgents d'encadrement de la decision de suspension des activites minières dans les provinces du Maniema, Nord Kivu et Sud Kivu. Kinshasa , DRC . Retrieved February 16, 2015, from www.miningcongo.cd
- Ministry of Mines, South Kivu (2012). Arrete Provincial 12/035/GP/SK. Portant du mise en place du comite provinciale au sud kivu du suivi de l'application des recommandations, resolutions et engagements du secteur minier a l'issue de la reunion de consertation a Kinshasa.
- Ministry of Mines. Arrete Ministeriel 0706: Mesures urgents d'encadrement de la decision de suspension des activites minières dans les provinces du Maniema, Nord Kivu et Sud Kivu. Kinshasa DRC
- MONUSCO (2013) Près d'une centaine de personnes ensevelies dans un glissement de terrain dans le Masisi, Nord Kivu. 20 May 2013. Accessed on March 26th 2015 at <http://reliefweb.int/report/democratic-republic-congo/pr%C3%A8s-d'une-centaine-de-personnes-ensevelies-dans-un-glissement-de>
- Mukasa, A. N. and Buraye J. K. (2009). La Filière Stannifère Artisanale au Sud-Kivu: Cas du Coltan et de la Cassitérite. L'afrique des Grands Lacs. ANNUAIRE 2008-2009.
- Obstacles to Post Election Peace in Eastern DRC: Actors, Interests & Strategies. 2011. Ottawa, Canada Fountain Publishers.
- PACT . (Juillet - Décembre 2013). Rapport d'avancement des Opérations de l'iTSCi sur le terrain au Sud-Kivu.
- PACT, Inc. (2010). PROMINES Study: Artisanal Mining in the Democratic Republic of Congo.
- Panel of Experts (2011). Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo. New York: UN Security Council.

- Priester, M. (2012) Baseline Audits of Mining Companies in Democratic Republic of the Congo to the CTC-Standard Set: Mwangachuchu Hizi International Baseline Audit Report. Hanover, Germany: BGR.
- PROMINES (undated a) Rapport sur les dispositifs de gestion financière et les ressources logistiques dans le secteur des Mines. Kinshasa: PwC.
- PROMINES (undated b) Rapport sur l'organisation et le fonctionnement du Ministère des Mines. Kinshasa: PwC.
- PROMINES (undated c) Rapport sur l'organisation et le fonctionnement du SAESSCAM. Kinshasa: PwC.
- PROMINES. (2014). l'Evaluation Stratégique Environnementale et Sociale Sectorielle (ESESS). World Bank.
- Radio Okapi (2013) Nord-Kivu : plusieurs dizaines de disparus dans un éboulement de terre à Rubaya. mai 17, 2013. Accessed on March 26th 2015 at <http://radiookapi.net/regions/nord-kivu/2013/05/17/nord-kivu-plusieurs-dizaines-de-disparus-dans-eboulement-de-terre-rubaya/>f
- Radio Okapi. (2013, September 19). <http://www.radiookapi.net>. Retrieved March 19, 2015, from <http://radiookapi.net/regions/sud-kivu/2013/09/19/sud-kivu-6-morts-dans-eboulement-dun-carre-minier-numbi/#more-161369>.
- Resources and resourcefulness: Roles, opportunities and risks for women working at artisanal mines in South Kivu, DRC 2014 Futures.
- Resources Consulting Services Ltd (RCS) (2014) CTC Standards Certification Audit of MHI Mining and the COOPERAMMA Cooperative's Coltan Mines at Bibatama, North Kivu Province, Democratic Republic of Congo. Kinshasa: Ministry of Mines/BGR.
- Rothenberg, D. and Radley, B. (2014) "We Miners Take Our Lives in Our Hands Save Nothing and Believe Only in Luck" The Lived experience Of Human Rights and Labor Violations in Select Artisanal Mining Sites in North and South Kivu. Tucson, AZ: Heartland Alliance for Human Needs and Human Rights and Center for Law and Global Affairs and the School of Politics and Global Studies at Arizona State University.
- Stearns, J. (2012). From CNDP to M23: The evolution of an armed movement in Eastern Congo. Rift Valley Institute/Usalama Project.
- Triest, F. (2013, November). Banro au Sud Kivu le secteur minier sous haute tension. La Revue Nouvelle.
- UNOCHA (2015). Rapport sur les Mouvements de Population en Province du Nord Kivu. <http://www.humanitarianresponse.info/operations/democratic-republic-congo/document/ocha-analyse-des-mouvements-de-population-en-provinc-5>
- USAID (2013) Land Tenure And Property Rights Matrix Minerals Overlay. Washington DC: USAID/Tetra Tech. http://usaidlandtenure.net/sites/default/files/USAID_Land_Tenure_Minerals_Overlay.pdf
- USAID (2014). Capacity Building for a Responsible Minerals Trade (CBRMT): An Assessment of Traceability and Due Diligence Systems-3Ts. Washington DC: Tetra Tech ARD.
- Vlassenroot, K. and Raeymakers, T. (2004). *Conflict et transformation sociale à l'est de la RDC*. Gent: Academia Pres.
- Wolfe, L. (2015, February 2). How Dodd-Frank is Failing Congo. Foreign Policy.

U.S. Agency for International Development

1300 Pennsylvania Avenue, NW

Washington, DC 20523

Tel: (202) 712-0000

Fax: (202) 216-3524

www.usaid.gov