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GENDER RESOURCE FACILITY

The Gender Dimensions of Tin, Tantalum and Tungsten Mining in the Great Lakes Region

Gender Resource Facility

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Acronyms

3Ts	Tin, tantalum and tungsten minerals
3TGs	3Ts and gold
AMCV	*Association de Mamans Chercheures de la Vie*
AMDC	African Mining Development Center
AMOPEMIKAN	Association of Women Mineral Operators in Kalimbe, Nyabibwe
ARM	Alliance for Responsible Mining
ASM	Artisanal and small scale mining
BGR	German Federal Institute for Geosciences and Natural Resources
CBO	Community-based organization
CTC	Certified Trading Chains
DFA	Dodd Frank Wall Street Reform and Consumer Protection Act
DGM	Department of Geology and Mines, Rwanda
DGSM	Directorate of Geological Survey and Mines, Uganda
DMFA	Dutch Ministry of Foreign Affairs
DRASPAC	Development Research and Social Policy Analysis Centre
DRC	Democratic Republic of Congo
EITI	Extractive Industries Transparency Initiative
FARDC	*Forces Armées de la République Démocratique du Congo*
FDLR	*Forces Démocratiques de Libération du Rwanda*
GiZ	*Gesellschaft für Internationale Zusammenarbeit*
GLR	Great Lakes Region of Africa
GRF	Gender Resource Facility
ICGLR	International Conference on the Great Lakes Region
ILO	International Labour Organizations
IPEC	International Programme on the Elimination of Child Labour
IPIS	International Peace Information Service
ITRI	International Tin Research Institute
iTSCi	ITRI Tin Supply Chain Initiative
MEMD	Ministry of Energy and Mineral Development, Uganda
MINIRENA	Ministry of Natural Resources, Rwanda
MONUSCO	*Mission de l'Organisation des Nations Unies pour la stabilisation en République Démocratique du Congo*
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development
OECD DDG	OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
OHADA	*Organisation pour l'Harmonisation en Afrique de Droit des Affaires*
PAC	Partnership Africa Canada
PPE	Personal Protective Equipment
RCM	ICGLR Regional Certification Mechanism
RINR	Regional Initiative Against the Illegal Exploitation of Natural Resources
SAESSCAM	*Service d'Assistance et Encadrement d'Artisanal et Small-scale Mining*, DRC
SGBV	Sexual and gender based violence
TIC	Tantalum-Niobium International Study Centre
UNDP	United Nations Development Program
UNECA	United Nations Economic Commission for Africa
UN Women ESARO	United Nations Agency for Gender Equality and the Empowerment of Women, Eastern and Southern African Regional Office
UPDF	Uganda People's Defence Force
USAID	United States Agency for International Development
VSLA	Village savings and loan association
ZEA	*Zone d'Exploitation Artisanale* (Artisanal Mining Zone)

Executive Summary

Mining of tin, tantalum, tungsten and gold (3TGs) in the Great Lakes Region (GLR) of Africa holds much promise to lead to economic, social and political transformation although its development potential is yet to be realized. 3TGs in the GLR are mainly produced via artisanal and small scale mining (ASM), an activity that provides a crucial source of livelihood and catalyst for economic development yet is often informal, highly manual and characterized by dire occupational, environmental and social risks. Over 300,000 men and women, adults, youth and children, produce 3TGs in the GLR, mainly driven to ASM by economic vulnerability or drawn by economic opportunity.

Justifiable international outrage in response to violence and conflict in the eastern Democratic Republic of Congo (DRC) has prompted efforts to extract 3TGs from financial flows of armed groups through trade regulations. These have had far reaching impacts on tens of thousands of miners, their families and economies with most significant impacts in countries at the centre of 3TG production, namely DRC, Rwanda, Burundi and Uganda. Women and girls constitute notable proportions of the ASM workforce (ca. 10-15% in 3T sites and 25-50% in gold sites) and - despite economic opportunities afforded by ASM and a growing number of efforts to formalize and improve its performance – gender inequalities in terms of income, control over resources, agency and voice, among many others, plague the sector and impede development.

Building upon impressive achievements in establishing ca. 1,500 conflict free mine sites and ensuring traceability of ca. 90% of 3T supply chains in the GLR, the Dutch Ministry of Foreign Affairs (DMFA) is providing support to the NGO Pact for the *Scaling Up Minerals Traceability Project*. The project aims to advance formalization of 3T ASM and its trading chains, strengthen good governance and transparency of conflict minerals and enhance both security and economic empowerment outcomes in DRC, Rwanda, Burundi and Uganda.

In light of progressive commitments of the Government of the Netherlands to prioritize gender equality in its foreign policy, DMFA requested assistance of the Gender Resource Facility (GRF) to: provide insight into the multiple gender dimensions of 3T production and trade in the GLR; augment and identify key gaps within the discourse on ASM and gender; and inform concrete recommendations for the *Scaling Up Project* and other mining platforms. This study reframes the discourse spanning the nexus of ASM, gender and conflict in the GLR and other countries along four dimensions of gender relations: gender division of labour, access to and control over resources, decision-making power and norms, beliefs and values. In doing so, it seeks to better understand how gender inequalities are manifested, produced, reproduced and challenged while informing directions for future research and intervention.

Key Findings and Conclusions

Findings demonstrate how disparate gender relations within ASM sites and communities are legitimized and entrenched by social structures, norms, beliefs and values that both result in, and are reinforced by, the varying abilities of women, girls, men and boys to participate in decision making, to exercise agency and to benefit from different roles and resources. This is reflected by the following:

- A significant proportion of ASM communities in the GLR are comprised of vulnerable and disadvantaged groups, including elderly and youth, many of whom are disenfranchised and sometimes landless or displaced. Within these groups, women and girls face additional disadvantages mainly owing to discriminatory beliefs, impediments to their agency and bargaining power, the undue burden of women's and girl's work, and lack of access to and control of key assets and benefits derived from them. These mutually reinforcing factors jointly: restrict women's and girl's access to skills, education and training; impede their freedom to participate and influence decisions that concern them; relegate the majority to lowest-paying, lowest-ranking jobs, thereby rendering their work largely invisible; and ultimately increase their vulnerability to insecurity, ill health, sexual and gender-based violence and other dimensions of poverty.

- Sexual and gender based violence (SGBV) is frequently used to operationalize harmful gender norms, beliefs, and values by reinforcing who is in control and who has the power. This ranges from grievous incidents intended to terrorize, as found in areas under rebel control in DRC, to more insidious forms of SGBV, such as discrimination, exploitation, humiliation or intimidation in secure regions of the GLR. Those with greater authority have excessive impunity in most ASM environments.

- Where women and men work in 3T sites licenced under cooperatives, the majority of mineworkers are often *de facto* members with little voice or influence. For women, this situation is exacerbated where their work is invisible or afforded lesser value. In reality, most cooperatives largely operate as companies but without corresponding commitments to the formal systems that provide important entry points to redress many gender issues identified herein.

- From household heads to leaders of mining crews to traditional and mining authorities, men largely dominate positions of authority within the social hierarchies that form around mine sites. Within their spheres of influence, authorities define the formal and informal rules of the game and thereby are positioned to sustain and augment their power through allocation of resources (e.g. jobs, mining areas) and distribution of benefits (e.g. according to social ties, patronage, greed). Although prevailing laws, norms and values play significant roles, the way resources and benefits are meted out is, often to a much greater degree, influenced by an authority's own beliefs about gender, rights and entitlements. Even where those in authority have proven to be important allies in advancing women's positions (including some government officers, local leaders and mine owners), many women nevertheless face multiple barriers to effectively engaging those in various positions of authority as a means to improve their own status.

- Women's participation in ASM work generally decreases as ASM becomes more mechanized, formally organized and legally operating. Such circumstances can bolster power of those in authority by further legitimizing their control over sites. This situation is exacerbated when women's labour is rendered obsolete by equipment that, rather than reducing women's work burdens or increasing their incomes, largely benefits whoever is best positioned to control it.

- Despite this, even under adverse conditions, women, girls and other vulnerable groups in ASM demonstrate remarkable resilience and ingenuity. A growing body of evidence indicates that participation in ASM and its economies has provided many women with increased incomes, agency, voice and bargaining power, thereby challenging prevailing norms, beliefs and values. Many examples affirm that women want training and financial support to increase benefits from mining, are self-organizing to demand access to mines and many are successfully changing mind sets of spouses, family and community members.

- Unless gender is adequately considered, legal reforms and institutional actions to formalize ASM and its trading chains run the risk of exacerbating rather than redressing gender equalities. Among a number of gender risks, the most impactful are measures that: fortify the power of relative elites and benefits accrued to them without commensurate expectations for gender accountability; and those that render women's work invisible or even obsolete by ignoring the gender implications of mechanization, organization and formalization. This is compounded by protective legislation that purports to serve but has effectively undermined women's interests (e.g. ambiguous laws concerning pregnant women in the ASM workforce) and the tendency to aggregate women's needs, priorities and interests with those of children. Such legislation appears to have actually increased risks of SGBV and negatively impacted women's socio-economic status while additionally serving to further affirm harmful beliefs that women's essential value and purpose is for procreation and childcare, rather than as individuals in their own right.

Several similarities and differences were observed between commodities, communities and countries studied (DRC, Rwanda, Burundi and Uganda). The successive conflicts that have devastated certain areas of eastern DRC have led to the most significant differences, marked by perpetuation of SGBV at astounding rates, widespread migration of women, men, boys and girls into ASM and the rate at which women have begun to tackle non-traditional roles in household and commercial spheres.

Women's low participation in 3T ASM (ca. 10-15%) compared to gold (ca. 25-50%) was attributed to several factors, among which is the relative success in formalizing 3T ASM and its supply chains. Although the extent of traditional authorities' control relative to decentralized institutions varies and, although culture both positively and negatively influences gender norms and beliefs, positive shifts in gender relations seem more pronounced in areas where the rule of law is more strictly followed.

Recommendations

Formalization of ASM and its trading chains represents an important opportunity to transform the sector into an engine for local and national development and significant contributor to peace in the GLR. However, realizing this potential shall largely be determined by the extent to which the gender dimensions of ASM are recognized, valued and incorporated in policy, projects and programs concerning minerals, peace building and development in the GLR.

Recommendations have therefore been provided targeting key stakeholders with significant influence and/or interest in advancing gender equality in 3T mining in the GLR. These range from Ministries of Mines and their implementing agencies to key development partners, such as World Bank, DMFA, GiZ and UN Women to mining cooperatives, civil society and academia.

Research

Critical lines of research have been identified for prioritization by academia and supported by donors and governments seeking to advance the discourse. This includes rigorous qualitative and quantitative research to:

- Assess reasons for women's lower participation in 3Ts when compared to gold and different factors (e.g. technical/geological, hierarchies emerging, history of formalization processes) contributing to differences in gender dynamics and outcomes;
- Understand when, why and how women and girls currently and successfully navigate power and authority structures as a means to identify strategies to advance transformative change. This should include research on how risks of increasing SGBV due to backlash (i.e. where men's dominant positions may be challenged) are successfully mitigated, and;
- Develop, disseminate and broadly employ data collection instruments to counter the invisibility of women's and girls' work in ASM and ASM communities and highlight gender dimensions of economic contributions (and their multiplier effects) in order to enhance gender advocacy efforts, ideally while enabling more robust comparisons between different factors.

Policy

International and national institutions engaged in formalization of ASM and its trading chains and/or the advancement of gender equality in the GLR are recommended to:

- Honour commitments made by ICGLR member states under the 2011 *Kampala Declaration on the Fight against Sexual and Gender Based Violence in the Great Lakes Region,* among which include obligations to mainstream gender in respective minerals policies. The ICGLR Secretariat should mainstream gender in the 6 tools of the Regional Initiative on Natural Resources (RINR), including those related to Tool #1: Regional Certification Mechanism and Tool #4: Formalization of ASM.
- Prioritize gender in current reforms of minerals policy, law, regulations and institutions in coordination with gender ministries and informed by gender analysis. A few entry points include: specifications for how and by who ASM organizations (associations, cooperatives, small companies) are formed and operate; inclusion of gender within environmental and social impact assessment processes and provision of simplified guidelines for "artisanal" operations; multi-stakeholder assessments of implications of protective measures (e.g. ban on pregnant women) and actions to prevent and mitigate related harmful outcomes; inclusion of gender targets in emerging local content policies; and regulatory requirements to incorporate gender within company/cooperative reporting requirements, among others.
- Develop guidelines, templates and regulatory requirements for companies and cooperatives to establish basic gender policies and embed gender within policies on occupational safety and

health, labour and environmental management. Complexity should be adapted to the category of mining (i.e. artisanal-, small-, medium-, large- scale).

- Elaborate strategies to report, identify, address and monitor incidences of SGBV in mine sites and communities, which supports compliance with OECD Due Diligence Guidance requirements concerning "*serious abuses associated with mineral extraction transport and trade*". Grievance mechanisms (in companies/cooperatives, communities, local monitoring committees, and others) warrant thoughtful, sensitive consideration. Given low reporting rates and potential repercussions for victims – including for more pervasive insidious forms of SGBV (e.g. discrimination, intimidation, threats) – deeper thinking of more holistic approaches to identify, track, audit and effectively respond to SGBV are warranted.

- Mining ministries should increase coordination with gender ministries and their decentralized offices to identify focal points for oversight of gender mainstreaming efforts, ensure staff receive requisite gender training at all levels and obtain gender guidance in policies, work programs, budgets and activities.

- Identify best practice policy examples demonstrating approaches to support women's economic empowerment, promote conducive national policies and laws (such as Rwanda's 2020 target of 30% women's employment) and undertake gender benchmarking of minerals sector policy and law.

- Commit resources to support proactive engagement of key stakeholders in the gender and ASM discourse, including UN Women ESARO, AMDC and UNECA and international initiatives.

Practice

Organizations implementing projects, programs and activities are recommended to:

- Conduct targeted training of government, implementing agencies (including NGOs and CSOs), donors, companies, cooperatives and other key actors with the intent of supporting transforming gender mind sets and commitments to action. Support for participation in emerging training courses (e.g. by UN Women, Carleton University) should also be provided.

- Subtly, systematically and repeatedly include gender issues via activities, scenarios and examples *used in a broad range of training and participatory processes* that prompt gender analysis by and increase women's visibility to stakeholders involved. Entry points range from legal reform processes to technical training programs to environmental and child labour sensitization campaigns, among others. Through repeated inclusion, gender analysis would be normalized as common practice and stakeholders compelled to revisit their own beliefs and roles in perpetuating the status quo with no real cost implication.

- Advocate for and support companies and cooperatives to appoint women's focal points, form women's groups therein and establish clear communication mechanisms (across the management hierarchy), grievance mechanisms and regular meetings with management.

- Support pilot projects to develop simple, practical company/cooperative policies, procedures and systems for ASM operations. These should span occupational safety and health, environment, human rights, community engagement and development, traceability and reporting and explicitly account for gender and human rights dimensions therein. This would include corresponding codes of conduct, clear lines of responsibility and accountability through the management hierarchy to the mineworker level, internal grievance mechanisms, procedures to evaluate incidents (including related to SGBV) and clear consequences for infractions, as well as basic training systems (e.g. induction, refresher) and communication systems to ensure awareness of policies and procedures at all levels

- Establish formal training programs in small scale mining (e.g. certificates, vocational training and education) with fixed targets (e.g. 30%) for women mine workers participation. Ministries of Education, Mining and supporting partners (e.g. companies) should be supported by donors to pilot and then roll out TVET programs.

- Support formation of associations, groups within and outside of mining entities and address critical training needs of women, girls and disenfranchised men and boys involved in mining. Gender responsive organization formation and strengthening should include capacity development in leadership and advocacy, numeracy, literacy and negotiation.
- Provide separate technical training targeting women in critical areas likely to support their economic empowerment, challenge harmful beliefs and reduce women's work burdens, such as in improved sluicing methods and prospecting and acquisition of mineral rights.
- Develop and disseminate guidance and materials on best practice in gender and ASM and support peer-to-peer learning targeting mainly women miners, some men miner leaders, cooperative and company leaders and government, via participation in related gender and mining dialogues and visits to good practice sites.

Finally, numerous organizations that are seeking to effectively account for gender within their respective thematic priorities at local, national and international levels hold tremendous promise. These include: governments undergoing mineral reform processes, UN Women's short courses on gender and extractives, UNEP's national action plans supported by the GEF Mercury Program, national gender action plans supported by the World Bank, and GLR-focused efforts of DMFA, GiZ, DFID and ICGLR among many others.

Multiple agencies are well positioned to provide the gender leadership needed to spearhead coordination and enhance knowledge sharing between these and sector stakeholders at all levels. Such leadership is urgently needed in order to create a "new normal" in the minerals sector, wherein gender considerations are systematically analysed and addressed as common practice, gender competence is a requisite at all levels and gender accountability underpins all action. Only then are real gains in women's empowerment and gender equality in the minerals sector likely to be achieved.

1. Introduction

The Great Lakes Region (GLR) of Africa is internationally recognized for its vast mineral wealth, hosting major reserves of diamonds, copper, gold, tantalum, tin and tungsten, among others. While it holds promise to lead to economic, social and political transformation of the region, development opportunities of the minerals sector are yet to be realized. At the centre of this are the successive violent conflicts that have plagued the eastern Democratic Republic of Congo (DRC), which have partly been fuelled by exploitation and illicit trade of tin, tantalum and tungsten minerals ("3Ts") and gold (jointly known as "3TGs")[1]. Justifiable international outrage at atrocities in the DRC has prompted efforts to extract 3TGs from the financial flows of armed groups through trade regulations, a move that the region was ill-prepared to respond to and with extensive repercussions on the livelihoods of tens of thousands of miners, their families and surrounding economies (Pact, 2015).

3TG exploitation is carried out in both conflict zones and peaceful regions mainly via artisanal and small scale mining (ASM). Well over 300,000 thousand men, women, youth, elderly and children work in 3TG exploitation in the eastern DRC and neighbouring Rwanda, Burundi and Uganda, most of whom entered the sector in response to abject poverty and lack of livelihood alternatives (Cook and Mitchell, 2014; Hinton, 2011; IPIS, 2013; Matthysen, 2014)[2]. ASM is dominated by largely informal miners using crude methods and with limited capacity to deal with the dire occupational, environmental and social risks that commonly characterize the sector. Women and girls constitute a significant proportion of the ASM workforce, averaging 40-50% across Africa (Hinton et al, 2003) but their work in the sector is largely invisible, as evidenced by largely aggregated local, national and regional statistics. Despite economic opportunities afforded by ASM, gender inequalities in terms of income, control over resources, agency and voice, among many others, plague the sector and impede development. This situation is worsened by pervasive sexual and gender based violence (SGBV), which, at best, pervades day-to-day activities in mining areas and, at worst, involves horrific incidences of mass rape emerging from the DRC (Hayes and Perks, 2012). Although ASM of 3TGs in the GLR is increasingly recognized for its ability to advance peace and local development, this ambition is unlikely to be achieved in the absence of gender-responsive policy and programming.

In order to help fulfil this potential, the NGO Pact has received support from the Dutch Ministry of Foreign Affairs (MFA) to advance formalization of 3T ASM and its trading chains, strengthen good governance and transparency of conflict minerals and enhance related security and economic empowerment outcomes via the *Scaling up Minerals Traceability Project* (Box 1). The project covers four countries central to 3T production and trade, namely DRC, Rwanda, Burundi and Uganda.

In light of commitments of the Government of the Netherlands to prioritize gender equality in its foreign policy, it has requested assistance of the Gender Resource Facility (GRF) to provide guidance and assistance to Pact on ways in which the project can increase its contributions to gender equality. Phase One of activities involved a desk study intended to provide insight into the multiple gender dimensions of 3T production and trade in the GLR and inform design of a second phase of research. Phase Two was comprised of field research in Rwanda and DRC involving six mine site assessments, interviews and focus groups supplemented by consultative meetings with a range of key stakeholders. The work specifically aimed to: identify practical, gender responsive interventions for inclusion within the *Scaling up Mineral Traceability Project;* provide concrete recommendations targeting existing and emerging mining platforms, and; to augment, and identify key gaps within the regional and international discourse on ASM and gender.

This study primarily draws from literature spanning the nexus of ASM, gender and conflict in the DRC, Rwanda, Uganda and Burundi, which is supplemented by key findings, conclusions and recommendations derived from recent field research in Rwanda and DRC. This literature justifiably emphasizes the often profound negative implications of ASM, including widespread sexual and physical violence, risks posed by low status jobs performed by women and girls and the proliferation

[1] 3Ts are exploited in mineral forms cassiterite (tin), wolframite (tungsten) columbite-tantalite or "coltan" (tantalum and niobium).

[2] Current estimates for 3Ts are on the order of 65,000-70,000 miners, 60,000 of which are working within the iTSCi traceability scheme (Hayes, pers. comm). Approx. 10,000 miners have left the system, presumably due to low 3T prices, many of which are believed to have shifted into gold production.

Box One: Scaling Up Minerals Traceability Project

In 2012, the Dutch MFA provided support for implementation by Pact of the ITRI Tin Supply Chain Initiative (iTSCi) through the Conflict Free Tin Initiative (CFTI) in the DRC. By mid-2014, iTSCi was successfully established in 681 conflict free mines in Rwanda, DRC and Burundi, serving ca. 72,000 artisanal miners and marking tremendous progress towards stability, security and sustainable livelihoods in the region.

Building upon this success and key lessons learned, the MFA is expanding its commitments through support to Pact for implementation of the 3-year *Scaling Up Minerals Traceability Project*. Specifically, the project seeks to achieve safe, self-sufficient, transparent and accountable artisanal mining and trading sector in the GLR in order to contribute to regional stability and economic growth and to the development of local communities.

Main objectives of the Project are to:

(i) Improve the formalization of artisanal mining and mineral trade;

(ii) Strengthen good governance and transparency of conflict-free minerals; and

(iii) Strengthen security and economic capacity of the mining sector.

Planned activities range from expansion of field operations to an additional 40,000 miners and 490 mines in the GLR to strengthening capacity of NGO partners and provincial and local multi-stakeholder committees to training miners in occupational safety and building their financial and numeracy capacity via Pact's WORTH economic empowerment program, among others. Given success of prior efforts and responsiveness to critical development needs, impacts of the project on peace, security and development across the region are expected to be significant.

Source: Pact, 2014, *Scaling Up Minerals Traceability in the Great Lakes Region Project,* unpubl. 64p.

of HIV/AIDS, among many others. Recent research now also seeks to better understand the extent of disadvantages experienced by different facets of ASM populations (elderly, children, migrants, women, men etc). Some have built on this body of work as a means to elicit strategies from women in ASM areas in order to identify ways in which gender norms can be challenged, injustices redressed, human rights fulfilled and opportunities cultivated for women's economic empowerment. Supplemented by ASM and gender research from other countries, this study reframes the current discourse, providing a basis to better understand how gender inequalities are manifested, produced, reproduced and challenged in the GLR while informing directions for future research and intervention.

1.1 Objectives

This report synthesizes literature, reports and statistics on gender, ASM and conflict in the GLR with findings from recent research in DRC and Rwanda in order to fulfil three objectives:

1. To enhance knowledge and understanding of ASM production and trade across the GLR and key gender issues therein.
2. To inform gender responsive interventions of governments and organizations engaged in ASM development and sector reform activities to ensure they effectively redress rather than exacerbate gender inequalities. The study additionally seeks to provide a basis for Pact's development of practical, realistic and effective strategies to respond to gender issues via *Scaling up Minerals Traceability Project.*
3. To contribute to the discourse on gender and ASM, including main issues, challenges, and opportunities, and to identify critical gaps in research.

Although notable gender and ASM contributions have emerged from Uganda, Rwanda and Burundi, the bulk of literature on ASM and gender in the GLR is focused on the DRC. The study is therefore limited in its depth and has necessarily drawn from work on broader issues in the GLR (e.g. mineral trade, conflict and SGBV) and research from around the world in order to strengthen the analysis.

1.2 Conceptual Framework

This desk study contends that gender inequalities in ASM in the GLR are largely a consequence of disparate power relations between women and men as defined within the hierarchies present in the household, community, mine site and countries. It therefore has adopted a gender relations lens to re-frame the analysis of ASM's gender dimensions in terms of: gender division of labour, access to and control over resources, decision-making power, and norms, beliefs and values.

Gender relations can serve to produce, reproduce and reinforce gender inequalities or, alternatively when challenged, they can ameliorate inequalities ideally leading to the empowerment of women, girls and other vulnerable groups. This study therefore seeks to understand existing gender inequalities in terms of how roles, resources and responsibilities are distributed, with a specific emphasis on gender relationships within mineral, mineral trade and other commercial systems of production. It further aims to understand the ways that social hierarchies – within ASM households, sites, organizations and communities – perpetuate power imbalances as a means to inform the identification of new strategies and approaches to the ASM sector.

1.3 Outline of the Report

Section One provides insights into the need for research on gender and ASM in the GLR, the scope and magnitude of the issues involved and purpose of the study. In further outlines key objectives of the work, limitations to the desk research and describes the guiding framework used in the analysis.

Section Two provides a foundation for understanding the gender dimensions of ASM in the GLR. This section sheds light on recent circumstances that have incited international attention towards "conflict minerals" and actions to address the opportunities and constraints provided by the sector. Additional insight is provided into the complexity of ASM, its drivers, and how it is being addressed through international, regional and state responses.

Section Three seeks to understand existing gender inequalities in terms of how roles, resources and responsibilities are distributed and impacts of this distribution within systems of mineral and non-mineral production. Special attention is afforded to gender dynamics and decision making in the household and, because it provides an additional means to reinforce who is in control and who has the power, SGBV. It examines some of the ways in which those gender relations are reinforced along the lines of its four dimensions: gender division of labour, participation in decision making, access to and control of resources and norms, beliefs and practices. Strategies used by women and vulnerable groups, many of which challenge the status quo, are also highlighted.

Section Four synthesizes findings and conclusions from the analysis with an emphasis on ways in which gender inequalities are manifest, created, reproduced or challenged and highlights the significance of this work to ASM discourse, policy and intervention.

Section Five seeks to provide recommendations for future research and institutions and organizations engaged in formalization of ASM and the mineral trade.

directly employs ca. 3,000 and drives the economy in the nearby town, home to ca. 100,000 (*Photo: J. Hinton)*

Box Two: Key Gender Concepts

Access to and Control over Resources	Access is the opportunity to use something. Control is being able to define and impose its use. Resources include time, information, educational opportunities, decision-making (bargaining power), income, and other economic resources, health and well-being, mobility, social networks and access to collective organization as well as internal resources such as self-esteem and confidence[b].
Gender	The concept of gender refers to the norms, expectations and beliefs about the roles, relations and values attributed to girls and boys, women and men. These norms are socially constructed, they are neither invariable nor are they biologically determined. They change over time. They are learned from families and friends, in schools and communities, and from the media, government and religious organizations.. [a]
Gender Analysis	The systematic gathering and examination of information on gender differences and social relations in order to identify, understand and redress inequities based on gender[a].
Gender Discrimination	The systematic, unfavourable treatment of individuals on the basis of their gender, which denies them rights, opportunities or resources[a].
Gender Division of Labour	Gender division of labour is how men/boys and women/girls are assigned different roles, responsibilities and activities according to what their society considers appropriate. They can be considered as productive, reproductive and community roles where each of these are not only deemed suitable for a specific gender, but they are also given different social values, particularly when undertaken by girls/women or boys/men[b].
Gender Mainstreaming	An organizational strategy to bring a gender perspective to all aspects of an institution's policy and activities, through building gender capacity and accountability.
Gender Relations	Hierarchical relations of power between women and men that tend to disadvantage women[a]. Social relations refer to power relations between people based on their social identities of class, age, ability, religion, caste, occupation, sexual orientation, urban/rural, gender etc. Social relations of gender are specific forms of power relations between boys/men and girls/women in a given society. These relations are socially constructed and historically and context specific. They change over time and are not a result of biology. Gender relations are not necessarily either entirely harmonious or conflictual[b]
Women's Empowerment	A 'bottom-up' process of transforming gender power relations, through individuals or groups developing awareness of women's subordination and building their capacity to challenge it. Empowerment is sometimes described as being about the ability to make choices, but it must also involve being able to shape what choices are on offer [a].

Sources:

a. Reeves, H. and Baden, S., 2000, *Gender and Development: Concepts and Definitions,* BRIDGE Institute of Development Studies, Report No. 55, ISBN 1858643813, 40p.

b. Wong, F. and Hunter C. (2011), *Facilitators Guide to the Training Components of the Plan Gender Equality and Rights Capacity Building Program*, KIT

2. Concepts: Mining as an Driver of Development or Insecurity

The links between mineral exploitation, conflict and insecurity in the GLR are complex and influenced by multiple events influenced by interconnected historical, geopolitical, economical and ethnic factors over the past century[3]. Cognizant of this complexity, many researchers, practitioners and governments are now seeking ways to transform ASM and its mineral trade into a catalyst for development and peace. As a foundation for understanding the gender dimensions of ASM in the GLR, this section sheds light on recent circumstances that have incited international attention towards "conflict minerals" and, conversely, prompted actions to address the opportunities and constraints provided by the sector. Additional insight is provided into the complexity of ASM, its drivers, and how it is being addressed through international, regional and state responses.

2.1 The Regional Context

2.1.1 *Minerals, Conflict and Insecurity in the Great Lakes Region*

With a death toll of 5.4 million between 1998 and 2007[4], the conflict in DRC is the "world's deadliest war" since World War II (IOC, 2014). Horrific accounts of human rights abuses by militias and soldiers, including mass rapes of and inconceivable violence against women, girls, men and boys, recruitment of child soldiers, sex slavery, disappearances on a startling scale, forced labour, among others continue to emerge (IOC, 2014). Those that survive such atrocities endure extreme physical and psychological trauma, stigmatization and breakup of families, displacement, loss of livelihoods and widespread poverty[5] (Côté, 2014; IOC, 2014, Mechanic, 2004).

The plundering of DRC's vast mineral wealth – and of 3TGs in particular – is often cited as one of the core drivers of the successive violent conflicts in portions of eastern DRC. Minerals (alongside ivory, timber, charcoal and other commodities) have provided the financial resources and incentives needed to stimulate and sustain both the conflict and its resulting "war economy" (Animatsu and Misty, 2012; Sikenyi, 2013). Over the past two decades, involvement of State and neighbouring State armies has contributed to the formation, dissolution and regrouping of multiple militias (IOC, 2014). Today, coordinated efforts by state and non-state actors have established tenuous security in many areas yet the eastern provinces – particularly North and South Kivu, Orientale and Ituri – continue to experience the spawning of new rebel groups, ethnically associated movements and community militias ('Mai Mai') (ibid).

The majority of artisanal miners in DRC often have significantly greater incomes than their non-mining rural counterparts yet are highly disadvantaged in terms of social status, political power and the capital (e.g. land, savings and other assets) needed to improve their wellbeing. This, combined with high levels of informality and weak, compromised, unpaid, untrained, or non-existent State institutions, make them an easy target for predation. As shown in Figure 1, although ASM and conflict in the GLR are undoubtedly linked, an increasing body of research clearly challenges the common portrayal of *all* ASM in the DRC as resulting from forced labour, coercion and slavery under control of armed groups (Hayes and Perks, 2012; Perks et al, 2015; Salter, 2009). In 2013, over half of ASM sites in North and South Kivu, where much of DRC's 3T production is centred, was estimated to be under control of the Army, militias and rebel groups (IPIS, 2013). As a result of multi-pronged efforts to stabilize the region, the number of mine sites under rebel control is believed to have significantly declined since then. The establishment of formal, functioning and sufficiently resourced state institutions in ASM areas will be critical to maintaining security.

In mines beyond armed group control, in eastern DRC as well as in neighbouring Burundi, Uganda and Rwanda, other forms of ASM-related conflict and insecurity are, however, prevalent including those related to: competition for resources (e.g. with mining companies, land owners and other

[3] A detailed analysis is not provided herein but a brief summary of the history of conflict in the GLR, including the roles of States neighboring DRC, is provided in Annex 2.

[4] The statistic refers to "excess deaths", or those above the expected norm. These are attributable to conflict *and* deaths associated with failures of health and social protection systems that are indirect consequences of the conflict.

[5] More than 2.8 million internally displaced persons (IDPs) or refugees were reported in DRC as of 2014. As of 2006, more than 70 percent of the Congolese population lived below the poverty threshold of $1.25 a day.

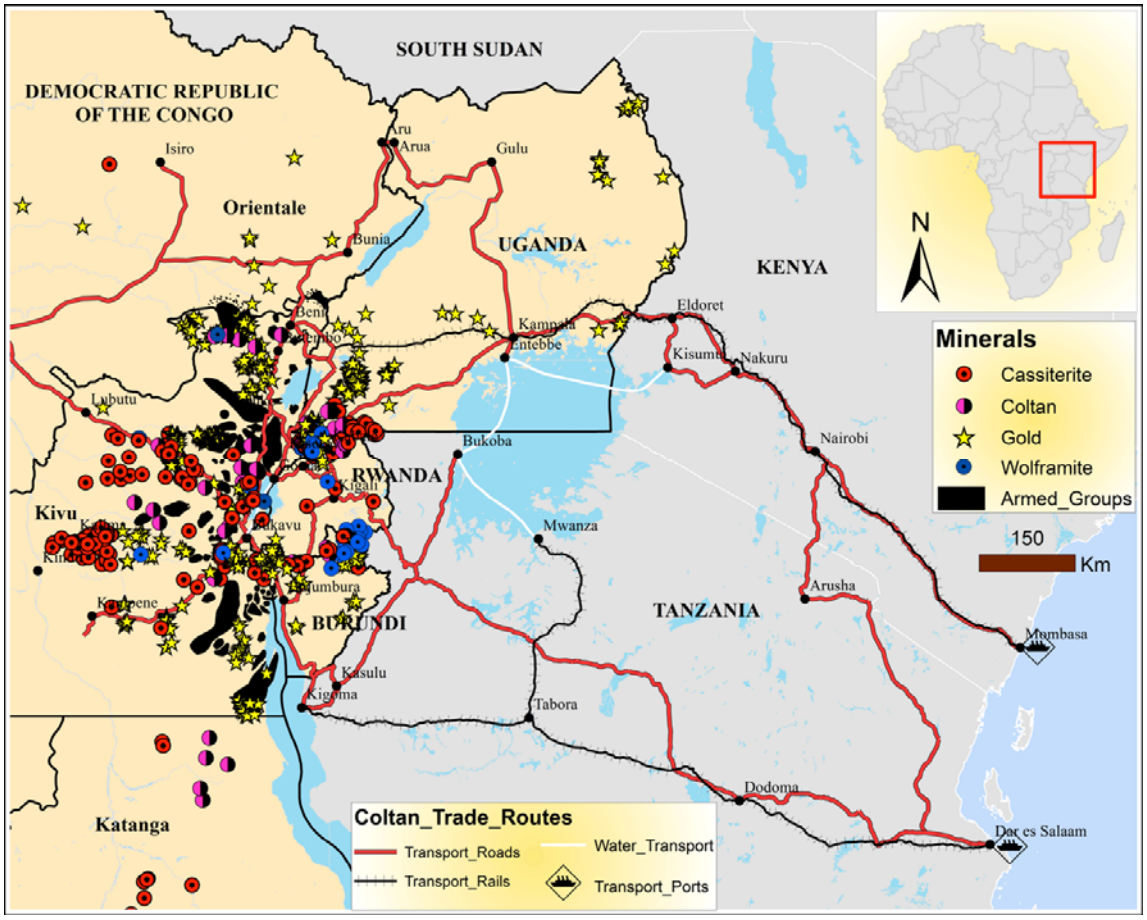

Figure 1: Location of Armed Groups (in black) as of 2014 in relation to ASM 3TG Sites.
Sources: Rutherford et al, ms; IPIS, 2014

resource users), exploitation by police, government officials and other authorities, and conflicts within ASM sites, communities and households (Cuvelier et al, 2014; Matthysen, 2014; Hinton and Mbabazi, 2011). Even in areas of relative peace, SGBV in its various forms is pervasive, thereby perpetuating the subjugation of vulnerable people and exacerbating gender inequalities, with far reaching implications for human rights, development and wellbeing.

2.1.2 *Artisanal and Small Scale Mining, Gender and Development*

The 3T belt of east and central Africa extends from the eastern DRC provinces of Kivu, Maniema, Katanga and Ituri to southwest Uganda, across Rwanda and into northern Burundi (Fig. 1). The region is a prominent global source of 3Ts and, together with other member states of the International Conference on the Great Lakes Region (ICGLR), provides 51% of the world's tantalum (28% of which is attributed to Rwanda), 3% of the world's tin and 2% of its tungsten (BGR, 2014).

As the majority of 3TG deposits in the GLR are too small or remote to justify industrial mining, most production is undertaken by ASM. In DRC and Burundi, respectively, 92% and 100% of 3TG sites are classified as "artisanal" (INS, 2012 cited in Perks et al, 2015; Channel Research, 2013)[6]. In Uganda, over 95% of gold and 3T production is attributed to mainly unlicensed ASM, although a number of 3T ASM activities take place under company-held mining leases (DGSM, 2015). Rwanda and parts of the DRC, notably Katanga, also rely on company-led models of semi-mechanized production of 3Ts combined with purchase from often several hundred artisanal miners in addition

[6] Despite decades of debate, there is no internationally agreed upon definition of "artisanal" versus "small scale" mining and legal definitions between countries often vary. See Section 2.2.1 and 2.2.2 for clarification.


Photos 2 and 3: ASM ranges from highly manual to somewhat mechanized.
(Left) A woman provides services pulverizing cassiterite ore using a mortar and pestle in South Kivu, DRC. *(Right)* Men slow feed ore into vibrating screens at a wolfram mine in Rwanda. (*Photos: J. Hinton)*

As mines become mechanized, manual jobs formerly done by many women and men commonly go to a few men operating simple machines **Photo 1: The landscape in Rubaya, North Kivu, DRC.** Coltan mining

to 3Ts produced by ASM cooperatives (however, it is unclear what proportion of the sector is informal). In any event, the majority of 3T exploitation in the GLR is undertaken by miners using the crudest methods and with limited skills and capacity to deal with the dire occupational, environmental and social risks that commonly characterize ASM (Hayes and Perks, 2012; Hinton, 2011; Matthysen, 2014)[7]. As explored herein, both women and men artisanal miners are impacted by these circumstances, yet women and girls are disproportionately affected in many ways, ranging from increased work burdens to exclusion from most lucrative jobs to increased exposure to SGBV.

Despite this, the ASM sector in DRC, Rwanda, Uganda and Burundi is increasingly recognized for its potential to provide an engine for local development, mainly as it provides non-agricultural, cash generating livelihoods, revenues from which stimulate other local enterprises and enable households to meet health, education and other family needs (Hayes and Perks, 2012; Matthysen, 2014; Hinton, 2011). In 2008, artisanal miners incomes in Uganda were estimated to contribute over $337 million USD into local economies by ca. 195,000 mine workers (ca. 45% of which are female) and indirectly supported over 4.2 million Ugandans (Hinton, 2009). In 2012, one in five rural villages in DRC were reported to depend on mining as the main source of income (NIS, 2012, cited in Perks et al, 2015). In 2014, mining in Rwanda provided direct employment for ca. 34,000 Rwandans, mainly in 3Ts, which indirectly benefits an estimated 170,000 Rwandans (Cook and Mitchell, 2014). In 2016 in Burundi, ca. 6,000-7,000 people work in 3T mining and ca. 14,000-27,000 in gold (World Bank, 2016). Numbers are highest in eastern DRC, on the order of 200,000 artisanal mine workers (IPIS, 2014)[8]. Although these estimates provide insight into the general livelihood significance of ASM, they obscure the gender dimension of ASM's potential, illustrating just one of the ways in which women's work, contributions and challenges therein have largely been rendered invisible. Women's participation in 3T exploitation, while lower than for gold, is nevertheless substantial (est. ca. 10-30%) with women and girls often playing more significant roles in the economies around ASM (Hinton, 2009; RDB, 2012; World Bank, 2016).

[7] An important distinction is made between ASM and those small-to-medium companies and cooperatives involved in 3T mineral production in the GLR and large scale mining ("LSM) operations. The latter can require several hundred millions of dollars of capital cost investment, is highly industrialized (and sometimes automated), has comparatively low labour requirements and greater environmental, occupational and social obligations. Much of ASM operates in the absence of *any* company or cooperative management and may or may not be licensed.

[8] While all legal definitions of ASM presented in Section 2.1.1 account for both the extraction (digging of ore), transport and recovery (concentration of heavy minerals, such as gold and 3Ts), women and others engaged in downstream activities other than extraction are often not considered to be "miners". While Ugandan and DRC estimates are believed to comprise all mine workers, this is less clear for Burundian and Rwandan "employment" estimates. Of note, it is unclear which eastern DRC provinces are included in the International Peace Information Service (IPIS) estimate.

Most women, men, girls and boys enter ASM to escape abject poverty and due to livelihood alternatives. Particularly in certain parts of the DRC, insecurity, violence and displacement have played central roles. For near surface, alluvial deposits in particular, ASM requires little investment and skills for entry to the sector, while underground and/or hard rock mining can require considerable financial investment that typically requires a 3rd party (pit owner) and lends itself to significant entry charges and deductions from individual miners' shares in production (see Sections 3.1.1 and 3.2.3). Nevertheless, ASM yields cash in hand, often on a daily basis and at levels well in excess of other available livelihoods (Hentschel et al, 2001; Hinton, 2005; Hayes and Perks, 2012; Perks et al, 2015). Even for the most vulnerable who possess meagre skills and resources, yield the least benefits and experience the greatest consequences, under most circumstances, ASM constitutes a well-reasoned livelihood strategy for almost 30 million artisanal miners around the world (Telmer and Veiga, 2009; ELL, 2011).

In large part owing to its exclusion from the formal economy, ASM is fraught with perilous working conditions, widespread environmental degradation, severe income inequalities and social ills including alcoholism, drug abuse, child labour and SGBV, a situation exacerbated by scant government services in remote mining areas (Hentschel et al, 2001; Hinton, 2005). Gender inequalities are pronounced in all facets of domestic, commercial and social life with implications not only for human rights, but for development of individuals, families, communities and countries.

All four countries considered in this study have, in principle, committed to formalization of ASM and the mineral trade as a means to advance peace and development. Despite this, it has been widely observed that as ASM becomes more formal, organized and mechanized, women's participation declines significantly, potentially resulting in further exacerbation of gender inequalities (Hinton, 2003; ICGLR, 2011). Given women's current and possible contributions, failure to ensconce gender in efforts to formalize mineral production and trade will impede fulfilment of ASM's peace building and development potential and the realization of women's rights.

2.2 Understanding Artisanal and Small Scale Mining (ASM)

ASM of 3Ts in the GLR is quite diverse in terms of the ways in which mining activities are structured, its degrees of formality, methods used, scale of operations and susceptibility of different sites and communities to external and internal forces, among many other factors that affect the gender differentiation of benefits and dis-benefits. Conceptual definitions seek to reflect this heterogeneity but are often in sharp contrast with the different legal definitions of ASM prescribed by governments. This section explores this diversity of ASM, it's disconnect with legislation and some of the dynamics through which its gender dimensions can be explored.

2.2.1 *Conceptual Definitions of ASM*

Despite widespread debate since the 1990's, no international consensus has been achieved on the definition of ASM or distinctions between "artisanal" and "small scale" mining. Consequently, the term "ASM" is commonly used to represent a *spectrum of activities* required for mineral extraction and processing that is variably defined by its level of mechanization and planning, degree of formality and legality and occasionally scale (e.g. depth, footprint, production), among other characteristics (Hentschel et al, 2001; Hinton, 2005; Hayes and Perks, 2012 and others)[9].

In the GLR and elsewhere around the world, methods vary widely. The crudest, lowest productivity methods – picks, hammers, shovels and basins and even use of rocks to smash other rocks – are often used by independently working or small groups of poor men, women and children, commonly tied by kinship, other commonalities, or debt. Although these methods are also common when miners work in teams (primarily comprised of men and boys)[10], such organization also often

[9] A comprehensive description of legal and conceptual criteria used to define ASM can be found in Hinton, J., 2005, *Communities and Small Scale Mining: An Integrated Review for Development Planning,* World Bank, 206p.

[10] Women can *also* be found working in teams in many localities (e.g. Katanga, DRC; Gifurwe, Rwanda and one all-women extraction team in Kikagati, Uganda) but this is much less common for women than men. Reasons for this are explored in other sections of this report.

enables use of higher productivity, intermediate technologies, such as sluice boxes, winches (underground) or perhaps even water pumps and other small machines. In more advanced, organized and typically most lucrative (i.e. high grade, hard rock) operations – where women's participation tends to be lowest – mineworkers may use small crushing machines, jackhammers or shaking tables while still largely relying on manual labour for extraction.

Although they still fall within the "ASM spectrum", in any of these scenarios, the miners (or groups of them therein) may *or* may not be working with legal permissions, may *or* may not work within a formal organization (e.g. a company, cooperative or association) and may *or* may not produce minerals in small quantities.

To add to this complexity, activities may be *seasonal*, often undertaken in small family groups as a means to supplement farming incomes, or *year-round* (Weber-Fahr, 2002; Hinton, 2005). It may be highly *migratory*, often performed by groups of young men moving from site to site, or it can prompt *mass migrations* to ASM sites, as in the case of ASM driven by shocks (e.g. conflict, displacement, drought, climate change) and rushes (e.g. "big strikes" of gold or 3Ts) (ibid). Finally, it may be *permanent*, carried out in a fixed location, sometimes requiring greater investment and organization.

Photos 4 and 5: The diversity of ASM creates challenges in licencing and regulation. Licencing requirements in Uganda (now under review) currently place the same requirements on *(top)* A family in north-eastern Uganda who mines on a seasonal basis (*Photo: J. Hinton)* and *(bottom)* Thousands of miners in this gold rush area in central Uganda (*Photo: H. Mukasa).*

These scenarios can differ greatly in terms of socio-cultural, economic, environmental, health and other effects on those directly involved in ASM and "host" communities, the ways in which social hierarchies emerge and evolve and resulting implications for the (dis-)empowerment of women, girls and other groups.

Although every production system is different, each scenario also requires different resources for entry and participation (e.g. time, social ties, membership fees, tools, etc), yields different benefits and risks (e.g. financial, occupational, social) and is influenced by differently structured lines of authority and power, with significant implications for the ways in which gender relations are produced and reproduced (see also Section 3.2).

Given this heterogeneity and that illustrated throughout this report, governments face major challenges developing suitable legal definitions needed to inform related laws and regulations[11]. This is compounded by lack of understanding of who miners are (which can include women, girls, men and boys of various ages, backgrounds and capacities), how they are organized, why they are

[11] Multiple case studies of ASM policy and legislation, including in east and central Africa, can be found in Hinton and Levin, 2010, *Comparative Study: Legal and Fiscal Regimes for Artisanal Diamond Mining*, USAID publ, EPP-I-00-06-00008-00, 80p.

mining and how they may be differently impacted by (and differently abled to comply with) legislation (Hinton and Levin, 2010).

2.2.2 *Legal Definitions of ASM*

In all four jurisdictions studied, ASM is only legally permitted in authorized localities and/or by pre-defined persons or entities. These criteria are prescribed as follows:

- *DRC*: Under the 2002 Mining Code, artisanal mining is "*any activity by means of which a person of Congolese nationality carries out extraction and concentration of mineral substances using artisanal tools, methods and processes within an artisanal exploitation area limited in terms of surface area and depth up to a maximum of thirty metres"* (Perks et al, 2015). The Mining Regulations of the same year specify that artisanal miners wishing to work on a *Zone d'Exploitation Artisanale* (ZEA) must be formed into a cooperative. There is also an official Code of Conduct (2003) for Artisanal Miners. Miners must also hold an artisanal mining card issued by provincial government but few possess this documentation. DRC legislation also provides for small scale mining, defined as "*any activity by means of which a person carries out permanent small-scale exploitation, requiring a minimum amount of fixed installations, by using semi-industrial or industrial processes, after a deposit have been found."* This license theoretically provides a means for entrepreneurs to "step up" their activities, by increasing their productivity and providing longer security of tenure needed to justify increased investment but requirements to complete a technical and economic feasibility study are elusive for most operations. The DRC has a dedicated service for ASM support and regulation, the *Service d'Assistance et Encadrement d'Artisanal et Small-scale Mining* (SAESSCAM). One of 11 SAESSCAM objectives commits the institution to supporting women's empowerment.

- *Uganda:* Under the 2003 Mining Act, small scale miners can obtain a "*location licence*", granted for mining operations requiring investment of less than 10 million USh (ca. $3000 USD) that do not use specialized mechanization or technologies. The license is for individual Ugandans or companies or associations with Ugandans as majority shareholders. (GOU, 2003). Given that terms and conditions associated with location licenses (costs, reporting, etc) are more suited to "small scale miners" rather than the mainly "artisanal" workforce, Uganda is currently developing distinct definitions for each via current reforms processes. The Directorate of Geological Survey and Mines (DGSM) carries out most ASM related activities via its Mines Department in association with licencing and inspectorate activities, however, no specific unit or department has been formed to respond to the diverse issues found in ASM.

- *Rwanda:* The current code provides for licencing of both artisanal miners (working within cooperatives on very small 49ha concessions) and small scale miners (within small companies, up to 100 ha), renewable after 5 and 10 years, respectively. Governments are active in grouping artisanal miners into cooperatives, unions of cooperatives and in a federation of all mining cooperatives covering the whole country with little legislation to back these efforts. Recent amendments allow for extension of 5-year production licences up to 25 years based on deposit size and characteristics.

- *Burundi:* The 2013 Mining Code requires "*Only mining cooperatives formed under the auspices of private and public companies may obtain a license for artisanal mining. Conditions pertaining to the formation of mining cooperatives and the issuance of permits and artisanal mining cards are specified by regulation."* As of 2014, no mining regulations were in place to specify the procedures or requirements of licencing (World Bank, 2016).

These criteria provide the foundation of laws and regulations that lay out the conditions and procedures by which licences or permits can be granted, maintained and revoked. Even with legal frameworks in place, the process of simply applying for ASM licences/permits can present a daunting challenge for the most vulnerable men and women mineworkers, even if organized. Common capacity constraints relate to language, literacy, numeracy, costs of licences/permits and transport, with additional challenges associated with the confidence needed to navigate often intimidating (and sometimes corrupt), bureaucratic and internally-competing channels of government (Hinton and Levin, 2010). In DRC, as of 2012, only 60 ZEAs had been designed, clearly precluding widespread regularization of ASM (IPIS, 2013), and approval requirements

(formal opinions from Directorate of Mines and Governor of the Province prior to final approval by the Minister) provide challenges for artisans seeking to formalize. In the case of women – conditions and norms hindering their agency provide an added barrier (examined in Section 3.2.2).

ASM licensing is often precluded in any event as most legislation does not allow for overlapping mineral rights and a major proportion of ASM in the GLR is taking place on concessions held by mining or exploration companies (IPIS, 2013; Matthysen, 2014; Hinton, 2009). Given perceived macro-economic benefits, governments tend to overtly prefer industrial mining, often influencing the extent that ASM legislation provides for or limits entry points for formalization and harmonization between large and small actors, producing a completely different range of gender issues to consider (Rutherford et al, ms). Despite perceptions by many in government, there are currently no industrial, large scale 3T mines in the GLR and only two industrial gold mines operating in the DRC (Hayes, pers. comm) and most 3T deposits, in particular, are only economic if extracted at a small scale and via manual or semi-industrial means.

In any event, "elite capture" of mineral production and trade (whether ASM is legalized or not) is prolific in the GLR and around the world (Cuvelier et al, 2014; Hinton, 2002; Matthysen, 2014; Perks et al, 2015). Consequently, the conditions provided by government are critical in determining who controls and benefits from legalization and the degree to which power structures are further entrenched, thereby affecting the extent to which harmful gender relations are countered or reinforced (Rutherford et al, ms).

The ways in which women and vulnerable persons navigate legal requirements for ASM (or are constrained from doing so) are further discussed throughout Section 3.2.3.

2.2.3 *Sector in Flux: Migration, Growth and Contraction of ASM*

Mineral resources are non-renewable and are inevitably depleted over time. Technical features (e.g. deposit characteristics, mining methods) are significant, yet a number of other factors also contribute to how and why ASM communities evolve in a given ASM area. These factors, dynamics and forces that influence why and when women, men, youth, children and the elderly of different ages, histories and capabilities, seek, pursue and exit from ASM livelihoods are explored below.

The main drivers for entry into ASM are poverty, lack of alternatives and, in the case of most seasonal ASM, the desire to supplement household incomes, although – particularly when prices escalate and "rushes" ensue - the allure of riches can also prompt some to leave their jobs and homes in search of opportunity. An added dimension exists in the DRC related to the prolonged armed conflict, frequently cited as a key driver of thousands of women, girls, men, boys of varying ages and origins into ASM. Although insecurity is undoubtedly a factor, implications of war on livelihoods and economies may figure even more prominently. Surveys by Perks et al (2015) in the South Kivu province, DRC, found that lack of money and employment was the key driver for 63.7% of women in ASM towns while lack of access to services (types not specified) was the main driver for men (58.1%). Displacement, insecurity and fear of violence were cited as the main reasons for taking up ASM for only 18.7% of women and 16.6% of men, and were also less significant factors than lack of access to food in home areas.

Migration has many different ramifications for women and girls compared to boys and men. Particularly in conflict zones, women and children who are left behind as their husbands (and perhaps sons) migrate to ASM areas, join the fight or are killed are extremely susceptible to SGBV by armed groups or neighbours seeking to takeover lands (UNDP et al, 2013). Among many implications, these circumstances can generate a shift in gender roles, wherein women become *de facto* household heads and necessarily need to exercise new forms of agency and decision-making (Mechanic, 2004), in many cases supporting the impetus for migration of many single, divorced or widowed women, with or without children, to mining areas (Perks et al, 2015).

In-migration of women, men, boys and girls of all ages to ASM areas can also generate significant shifts in socio-cultural norms within host communities, beyond those resulting from the oft-cited

rampant alcohol, drug abuse, prostitution and other ills associated with rush and shock-push ASM, in particular (Veiga and Hinton, 2002).

In addition to often introducing new gender norms and behaviours, when migrants are dominated by one or more ethnic groups, their different skills, practices and resources (e.g. money, business savvy, skills) may cause shifts (for the better or worse) in the prevailing social hierarchy controlling mine sites, local economy, land use and other facets of the community, sometimes undermining existing authorities.

In some localities, incoming populations may possess greater economic resources and business savvy, enabling them to rapidly dominate mineral production and trade. In others, small numbers of migrants representing specific demographics (e.g. gender, age, ethnicity, language) may experience social exclusion and increased vulnerability due to diminished ability to gain entry to better jobs, share skills and knowledge and obtain fair prices for goods and services (Perks et al, 2015). In Orientale, young men and boys previously involved in militias find a relative "safe haven" in ASM sites (and deterrent to re-joining rebel groups), where work in teams with clear hierarchies, ample alcohol and life in the bush provides an easier and more familiar transition than reintegration into societies where they had previously committed acts of violence (K. Hayes, pers. comm).

The extent and nature of gender implications seems to differ depending on this, as well as the type of ASM. For example, unlike shock-push and rush ASM, permanent ASM mainly attracts jobseekers from nearby communities, yet it can also lure those from farther afield. While seasonal ASM is typically not linked with mass migrations (Matthysen, 2014), it may nonetheless introduce disenfranchised, unemployed young men and occasionally women, to the skills and affinity for mining and associated service-provision, encouraging their migration and entry into other types of

Photos 6: Production continues at this site despite declines in 3T prices.
Although many 3T operations have halted activities due to low metal prices, this DRC site continues to be active. This is likely due to a combination of factors including: low production costs given reliance on manual methods, payment based on production that places much of the financial risks on pit owners and mineworkers) and an abundance of cheap labour with limited alternatives (*Photo: J. Hinton)*

mining scenarios (IPEC-ILO, 2004). In South Kivu, both young women and men queried, especially those who grew up only in times of conflict, expressed scepticism of the viability of, and even a degree of disdain for, agriculture (Perks et al, 2015). In Katanga, alternatives to mining put forth by young men and women ranged from IT and truck drivers to footballers and singers (K. Hayes, pers. Comm.) This sharply contrasts with desires of the older generation to return to their farms upon the restoration of security, despite risks of returning to lack of recognition of their land rights and related risk of violence, rape and murder (Perks et al, 2015).

Photo 7: After the rush.
Two women pan tailings in the months following a small gold rush in Uganda (*Photo: J. Sasirwe).*

Given this reality, coupled with population growth rates, increasing land pressures and limited livelihood alternatives as well as challenges countering the successive conflicts in the DRC (and more recent tensions in Burundi), ASM and ASM-related migration is likely to escalate in the GLR in the coming years.

The dynamics of ASM, and their gender implications, however, are not limited to those concerning in-migration but also the effects of out-migration following depletion of mineral resources. Indeed, all types of ASM undergo the cycle of discovery, migration and relative economic prosperity followed by resource depletion, outmigration and economic destitution (Veiga and Hinton, 2002). Effects are typically more pronounced where economies form specifically in response to ASM, e.g. shock-push and rush ASM, where depletion can occur quickly, spurring equally rapid outmigration of the masses (ibid), much of which is often tied to mineral prices, prompting shifts from 3Ts to gold and back again as new sites are discovered.

Those mineworkers and businesses that remain in former rush areas scramble for increasingly fewer returns, harshly impacting those most vulnerable, i.e. who earn the lowest incomes and often face greater challenges in migrating to new ASM sites or transitioning into better livelihoods, such as most women with children, the elderly and orphans. Understanding the implications of the ASM cycle on transformations – of local cultures, economies, landscapes, and in the lives of those women, men, girls and boys engaged in and impacted by ASM – and gender implications therein presents a singular challenge for understanding how ASM can effectively transform into an engine for human development.

The role of external forces on the growth and contraction of ASM adds to this complexity. The most significant international force controlling the ebb and flow of ASM activities is commodity prices. Although "fixed price" arrangements between producers and buyers do exist (Section 3.1.1) local sale prices commonly fluctuate in-line with market prices. ASM dynamics are often described with reference to high prices inciting rushes yet, currently, the global mining sector is experiencing a plunging mineral prices, 35% for some minerals between 2011 and 2014 (World Bank, 2015), with declines continuing. 3T minerals have not been spared and tungsten and tin have been especially hard hit.

The livelihood impacts of plunging metal prices are substantial. In the tin mining area of Lemera, in eastern DRC, the sale price of cassiterite (tin) concentrate dropped from $8 USD/kg in 2010 to $2.5 USD/kg in 2012, resulting in workforce reductions in from 2000 diggers in 2010 to 100 diggers in early 2012 with devastating effects on local economies (Cuvelier et al, 2014)[12]. As expressed by one women restaurant owner (Cuvelier et al, 2014:11):

[12] Cuvelier et al (2014) indicate that the sharp drop in prices in eastern DRC was a consequence of President Kabila's mining ban in eastern DRC that took place between September 2010 and March 2011. While this was undoubtedly a factor, this example nevertheless illustrates the significant local impact of changing market prices.

"I had a big problem because the people came to eat but did no longer pay…. this created a serious problem in my life, I didn't eat as before, I couldn't look after my responsibilities as mother of the family as before, and even the children who studied were no longer able to continue. And today, I have abandoned the work of 'restauratrice' and have a capital of just 10 USD and am now selling ripe bananas in the street to support the family."

Clearly, the broader implications of such forces cannot be underrated, including for those women who have succeeded in leveraging their resources to improve their economic and social status, in many cases prompting shifts in both gender beliefs in ASM communities and power dynamics in the household (Section 3.1.3). While those who have achieved some (comparative) advantage in ASM areas are experiencing harsh effects, the Lemera example alludes to the extent to which major shocks and stresses must profoundly impact those most vulnerable in ASM communities, and women and girls in particular. The gendered effect of other key externalities in ASM is further examined in Section 2.3, below.

2.3 International, Regional and State Responses to ASM in the GLR

The prolonged conflict and resulting human rights atrocities in eastern DRC has justifiably incited intense emotion and international attention, prompting a range of responses by affected States, regional bodies, human rights organizations and the international community. The most influential of these was the Dodd Frank Wall Street Reform and Consumer Protection Act (DFA) passed by U.S. Congress in 2010 (Cuvelier et al, 2014). Following intensive lobbying by certain U.S. policy makers and persuasive human rights NGOs, the DFA incorporated Section 1502, requiring companies listed on the US stock exchange to disclose whether the products they manufacture (or are contracted to manufacture) contain 3Ts or gold and to take measures demonstrating that such minerals do not "directly or indirectly finance or benefit armed groups" in the DRC or its neighbours (Pact, 2015; Cuvelier et al, 2014). DFA Section 1502 specifically cites the Organization for Economic Cooperation and Development's (OECD) *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* (also known as OECD DDG), which provides the foundation for most programs that followed.

Many contend that DFA Section 1502 was too hastily introduced with no resources and marginal plans to support in-country response, and quickly served to increase the vulnerability of miners and their communities, mainly due to loss of markets upon disengagement of many western companies from the GLR (Cuvelier et al, 2014; Mourik, 2012; Seay, 2012). Shortly after its adoption, Asian smelters with sufficient domestic markets and exemption from DFA's influence, gained traction on the ground as the number of pre-existing exporters and traders waned, and was followed by drastic reductions in purchase prices and lower incomes for miners on the ground (ibid), undoubtedly yielding similar gender effects as falling mineral prices (Section 2.2.3).

This was exacerbated upon institution of a mining embargo in the Kivus and Maniema by DRC's President Kabila between September 2010 and March 2011, presumably in response to American pressures (ibid). Impacts in ASM reliant economies included increased incidences of malnutrition, school dropouts and failure to pay medical costs, among others (Geenan, 2012), likely with great implications for women and girls, given their responsibilities for household food provision, care of the sick and the tendency to educate boys before girls.

Within the same time period, member states of the ICGLR – namely DRC, Angola, Burundi, Central African Republic, Kenya, Republic of Congo, Rwanda, Uganda, Sudan, Tanzania and Zambia – signed the "*Regional Initiative against the Illegal Exploitation of Natural Resources*" (RINR) in December 2010, thereby formalizing their adoption of the RINR's legal framework ("*Protocol on the Fight against the Illegal Exploitation of Natural Resources*") [13]. Amongst other commitments, the Protocol endorsed the OECD DDG and called for establishment of an ICGLR Regional Certification

[13] The six tools of the RINR are: (1) Regional Certification Mechanism (RCM); (2) harmonization of mining legislation; (3) regional database on mineral flows; (4) formalization of ASM; (5) EITI Peer Learning Mechanism; and (6) whistle-blowing mechanism.

Photo 8: Improving gender-responsiveness of companies.
With support from BGR's CTC program, in 2010 a number of companies received guidance and were willing to adopt measures to recruit, train and promote women while improving working conditions. A resulting template for simple gender equality policy provides a model (*Photo: J. Carstens)*

Mechanism to be implemented by the ICGLR Secretariat and all member states (Cook and Mitchell, 2014). In 2011, ICGLR member states signed the *Kampala Declaration on the Fight against Sexual and Gender Based Violence in the Great Lakes Region,* among which include obligations to mainstream gender in respective minerals policies. Detailed guidelines were developed in 2012 to help member states fulfil these commitments, and provided additional insights into how the sector can support related SGBV strategies (Hinton, 2012), although actions have been marginal.

Prior to these events, in 2009, the International Tin Industry Association (ITRI) commenced development of the ITRI Tin Supply Chain Initiative (iTSCi) and began to implement pilot projects in the region in collaboration with the International Tantalum Association (T.I.C.) (Pact, 2015). Under MOUs with the Governments of Rwanda, DRC and Burundi, iTSCi initiated operations in Rwanda, DRC and Burundi since 2010, 2011 and 2014, respectively, and provides the basis through which ICGLR regional certificates are currently issued (Box 3). Following adoption of DFA Section 1502, a range of other responses by international mining and electronics companies have been instituted, particularly as global awareness of the DRC conflict has risen and with it consumer pressures, alongside appreciation of the impacts of western disengagement in the GLR (Cuvelier et al, 2014). Complementary 3T initiatives, such as Certified Trading Chains (CTC) by the German Geological Survey (BGR) which has mainly targeted selected mines in Rwanda, and gold traceability pilot projects (e.g. Fair Mined Gold by the Alliance for Responsible Mining (ARM); Fair Trade Foundation's Fair Trade Gold in Uganda, Kenya and Tanzania; Just Gold Project by Partnership Africa Canada (PAC) in DRC) continue to emerge in ICGLR member states, most of which also aim to tackle broader development issues alongside efforts to establish traceability.

In addition to obvious benefits for peace, security and development, these projects and schemes are well positioned to advance gender equality. This includes by increasing attention to multiple forms of SGBV (e.g. discrimination, exploitation, physical and verbal abuse), in conjunction with OECD DDG requirements to counter "*serious abuses associated with mineral extraction transport and trade*". Although ICGLR's whistle-blower mechanism, one of the 6 pillars of the RINR, could holds promise for anonymous reporting of SGBV, it is yet to be implemented. iTSCi currently also supports an independent, third party whistle-blowing mechanism with a local NGO Save Act Mine

and also has a 24-hour incident monitoring process for human rights abuses and seems effective for extreme events, e.g. mass rape by armed groups (K. Hayes, pers. comm). However, the feasibility of using *any* of these mechanisms to identify, track, audit and respond to more pervasive, insidious incidents of SGBV requires much deeper thinking. In conjunction with baseline study data collection, capacity building of provincial and local mining committees in DRC and a number of other activities under the *Scaling Up Minerals Traceability Project* (Box 1), DMFA and Pact are exploring ways in which SGBV, women's economic empowerment and a range of other gender issues can be tackled through the Project.

Evolving policy, legal and institutional frameworks governing the minerals sector in the GLR provide multiple gender entry points, yet gender seems to have been afforded marginal consideration[14].

Box Three: Overview of iTSci in the GLR

The ITRI Tin Supply Chain Initiative (iTSCi) was initiated in 2009 and began operations in Rwanda in late 2010, DRC in 2011 (North Kivu in 2014) and Burundi in 2014 with Pact as their implementing partner. Coverage is extensive (ca. 90% of all 3T production in the GLR) and membership includes 227 companies in 31 countries, including 156 upstream companies, independently evaluated and confirmed as full members, 71 companies under evaluation and 9 downstream associate members (Apple Inc, BlackBerry, Boeing, Intel Corp, Iiyama Benelux B.V, Microsoft Corp, Motorola Solutions, NEC TOKIN, Qualcomm Technologies).

Table B3: Coverage of the iTSCi in the GLR (as of December 2015)

Country/ Province	Number of sites	No. of miners	Ave. mine production (kg/m)	Total Incidents	Level 1 Incidents
DRC					
Katanga	187 sub-sectors 250 pits (94 active)	14,945	2014: 477,072 2015: 357,804	2014: 233 2015: 168	2014: 6 2015: 7
Maniema	80 sub-sectors 207 pits (188 active)	6,730	2014: 172,654 2015: 170,723	2014: 42 2015: 60	2014: 1 2015: 2
South Kivu	27 sub-sectors 57 pits (53 active)	2,877	2014: 65,597 2015: 145,519	2014: 44 2015: 87	2014: 0 2015: 2
North Kivu	28 sub-sectors 60 pits (59 active)	6,810	2014: 86,155 2015: 110,558	2014: 65 2015: 137	2014: 1 2015: 6
Rwanda (All provinces)	319 companies 873 sites(375 active)	21,055	2014: 995,965 2015: 649,039	2014: 205 2015: 262	2014: 0 2015: 4
Burundi (All provinces)	34 sub-sectors 43 sites (30 active)	2,992	2014: 11,487 2015: 16,591	2014: 22 2015: 43	2014: 0 2015: 1
TOTAL	**1,483 sites (831 active)**	**55,409**	**2014: 1,794,572 2015: 1,468,234**	**2014: 611 2015: 757**	**2014: 8 2015: 16**

The scheme provides an invaluable mechanism to track and respond to incidences of non-compliance with OECD DDG, with local, provincial and national multi-stakeholder committees playing a critical role. As of December 2015, each of DRC, Rwanda and Burundi had established National Steering Committees with provincial committees established in Katanga, Maniema, North Kivu and South Kivu. Local committees are active in 25 localities and meet regularly to track, address and report to incidences as they are identified while reviewing security situations in their respective areas on an ongoing basis.

Source: www.itro.co.uk.

[14] Based on the author's discussions with various policy makers, practitioners and organizations working with governments on this issue (e.g. some policy makers contend that removing restrictions on women working in mines is sufficient to account for gender). This is further evidenced by failure to adequately account for gender in the ICGLR Regional Certification Mechanism, and use of gender neutral approaches in advancing cooperatives in Rwanda and Burundi (Section 2.2.2), among others.

The most progressive and ambitious commitment has been made by Government of Rwanda, who is targeting 30% women's employment in all aspects of the mining sector by 2020. However, MINIRENA currently has not put forward any concrete strategies to achieve this target (WIAMO, 2016).

Many development partners are currently implementing programs with potential to assist governments in fulfilling national, regional and international commitments to gender equality in the minerals sector.

Among these, the World Bank is actively supporting the Government of DRC to develop national gender action plans, grounded in thorough gender analysis and inclusive grassroots consultative processes (Perks, pers. comm). UN Women (via the Eastern and Southern African Regional Office, ESARO) is escalating their engagement in the sector and developing short training courses on gender and extractives targeting policy makers. African Mining Development Center (AMDC) and UNECA are reportedly conducting a gender analysis of the Africa Mining Vision (AMV), which will ideally translate directly to their efforts to promote reforms that advance development and industrialization across the continent. With support from the Canadian government, PAC has identified gender as a priority and is providing technical support and guidance to the ICGLR Secretariat and Member States, creation of a civil society platform used for OECD-DDG related training and dialogue, and, in partnership with Carleton University and with support from IDRC, is developing a short training course of gender and artisanal mining policy, law and governance. USAID has initiated an extensive program in the DRC, including efforts to strengthen SAESSCAM's capacity (including with respect to fulfilment of their extension services mandate and organization of ASM), thereby providing a significant opportunity to enhance the agency's gender competence in the process.

On-going processes by governments to domesticate the ICGLR Regional Certification Mechanism and institute sector reforms provides an unprecedented opportunity to redress gender inequalities and advance women's economic empowerment in the sector. If ignored, these measures have potential to further entrench or worsen inequalities even further.

While the plethora of projects, programs and commitments underway holds promise, efforts by governments, ICGLR *and* iTSCi are currently at great risk. Low 3T commodity prices have markedly reduced production and, with it, royalties, fees and taxes accruing to governments, who may be even less likely to prioritize ASM, and gender issues therein. As ICGLR examines modalities for financial sustainability of its regional certification mechanism, iTRi also faces challenges (ICGLR, 2016), particularly given that 86% of its operating funds are derived from levies on mineral production, with downstream consumers bearing a meagre 1% of costs (K. Hayes, pers. comm). Sought after benefits in terms of inclusive development, peace, security and human rights are unlikely to be yielded unless solutions for these diminished revenues can be found.

3. The Gender Dimensions of 3T Mining in the Great Lakes Region

This section seeks to understand existing gender inequalities in terms of how roles, resources and responsibilities are distributed and impacts of this distribution (Section 3.1). Special attention is afforded to SGBV as – whether it is carried out for punitive purposes, to terrorize, to humiliate or to effect payment for debts or entry to certain work – it provides an additional means to reinforce who is in control and who has the power and resources. It examines some of the ways in which those gender relations are reinforced along the lines of its four dimensions: gender division of labour, participation in decision making, access to and control of resources and norms, beliefs and values. Strategies used by women and vulnerable groups, many of which challenge the status quo, are also highlighted (Section 3.2).

3.1 Rules, Roles and Resources in ASM Sites and Communities

Within ASM and ASM communities, a broad array of functions, roles and tasks exist that yield diverse benefits, risks, constraints and opportunities to improve economic and social wellbeing. Across the supply chain and in communities, this can include license holders, financiers, pit or shaft owners and bosses, labourers paid in wages or production, cooperatives and association leaders and members, dealers, traders, shop and restaurant owners and workers, formal government and traditional authorities, farmers and those engaged in other non-mining livelihoods, among others (Levin and Gberie 2006; Eftimie et al, 2012). Different functions and jobs may be dominated by different groups according to class, age, gender, ethnicity and other factors although many people undertake multiple roles concurrently (Hayes and Perks, 2012).

This section reframes the current literature by exploring gender aspects across systems of mineral production and trade (Section 3.1.1) and livelihoods in economies that form around ASM (Section 3.1.2). It also examines the additional influence of ASM household dynamics (Section 3.1.3) and significant challenges presented by SGBV (Section 3.1.4) on women's and girl's agency, autonomy and empowerment. Section 3.1 therefore provides the foundation for deeper understanding the ways in which gender relations are reinforced or challenged, as examined in Section 3.2.

3.1.1 *System of Mineral Production and Trade*

This section outlines different functions, tasks and roles of women, girls, men and boys across the different phases of the production and in-country trading chain: (i) ore extraction, (ii) transport of ore, waste rock and water; (iii) mineral processing (crushing, grinding, sorting and separation/concentration of valuable minerals); and (iv) mineral trading (see Figure 2 on the next page). It also introduces the gender aspects of resources needed to access to different jobs (e.g. tools, social ties) and the risks (e.g. occupational, SGBV) and benefits (e.g. financial, prestige) associated with different functions.

It further highlights ways that different phases and functions are organized. In some cases, the entire production process is under a single structure or team, while in others, functions are specifically compartmentalized, done individually or in small groups. The entire "production system", or portions therein, vary from site-to-site and may or may not operate under a cooperative, association, owner, company or other overarching authority. The authorities that emerge within and between different organizational structures play key roles in determining who participates, what functions they perform and how benefits are distributed (Rutherford et al, ms).

Although important exceptions exist, women rarely occupy positions of authority in these systems, affording them little decision making power. In general, they are relegated to the most menial and lowest paid positions in transport and mineral processing (Hayes and Perks, 2012; Perks et al, 2015), while best paying and most respected functions are dominated by men, including exporters, mineral dealers, mine/claim owners, subcontractors (capitas), team leaders, equipment owners and financiers, and (although still often underpaid), diggers[15]. Positions in leadership of

[15] Additional quality jobs are found in small 3T mining companies. In Rwanda, women held only 9.4% of jobs in 2012, 48.6% of which fell under the category of "skilled craftsmen/artisans/tradesmen" (electricians, welders, etc) and 33.4% as "elementary occupations" (unskilled workers, cleaners, gardeners, security guards, waiters, cooks) (RDB, 2012)[15].

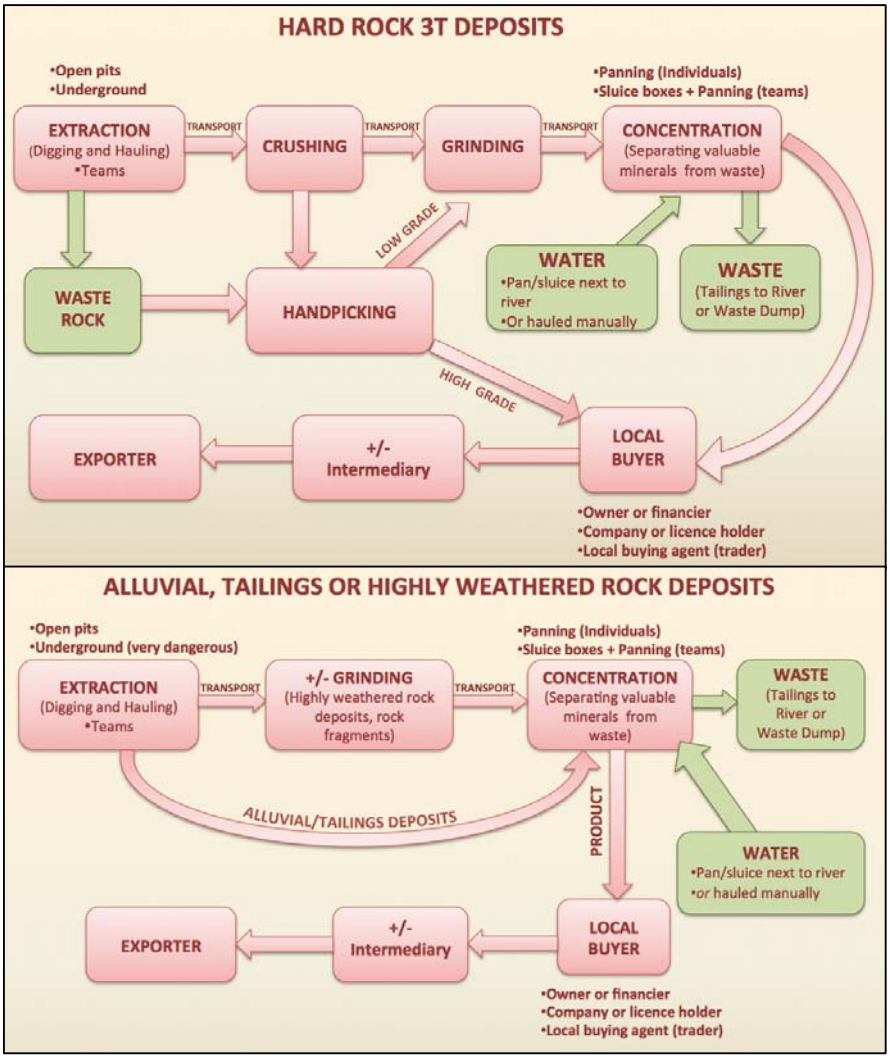

Figure 2: Main Steps in Production and Trade of 3T Minerals and Gold
(*Source:* Rutherford et al, ms)

cooperatives can also be lucrative, depending on how equitably revenues are distributed[16]. Of course, some women do occupy key roles in management, own pits and achieve success in mineral trading, although this is more commonly the exception rather than the rule. The status quo of the system of mineral production and trade, and gender implications therein, are introduced here, and examined more thoroughly in Section 3.2, alongside factors that seem to support the advancement of some women in so-called "non-traditional" roles.

Ore Extraction

The process begins with excavation of ore in the form of hard or highly weathered rock, tailings (mine waste) or, when in or adjacent to rivers, sediments. Mining can involve shallow excavations next to or within flowing or buried rivers that are often only a few metres deep (alluvial mining), open pits that are up to 10's of metres in diameter and several metres deep or via underground shafts and tunnels that, if rock is sufficiently competent, can extend to 100m deep or more, (Channel Research, 2013; Dreschler et al, 2010; Auranda Minerals, 2015). In all four countries, extraction is largely dominated by young men (70-100%, depending on the site) (Perks et al,

[16] For example, Rwandan miners and processors earnings constitute 40%, 43% and 63% of the export value of cassiterite, wolframite and coltan, respectively, while companies and cooperatives earn 44%, 31% and 19% (excluding due diligence costs) (Cook and Mitchell, 2014).

Photos 9 and 10: Extraction of hard rock ore.
(Left) A woman and her husband in northeastern Uganda extract ore from a shallow underground tunnel. They will later grind the rock and pan it themselves. (*Photo: J. Hinton*)
(Right) A team of men in North Kivu, DRC extracts coltan ore from depths of tens of metres, pack it in sacks and hauls it to sluicing teams (*Photo: J. Hinton*)

2015; Hayes and Perks, 2012; Cook and Mitchell, 2014; Matthysen, 2015; Hinton 2008; Hinton and Mbabazi, 2011). Women who *do* work in extraction are mainly (but not always) involved in working individually or in small groups to dig shallow pits in alluvial (river), tailings or softer, highly weathered materials, which are generally much less lucrative than high grade, hard rock veins.

In the case of alluvial materials or tailings, little financing is required (e.g. a shovel and basin), enabling less advantaged women and others to undertake the work. In Central Katanga, notably in some of the urban mines in the town of Manono, some tailings sites are managed and operated by women though these are exceptional. By comparison, hard rock excavations can in some cases take weeks or months of digging and sometimes tens of thousands of dollars of investment until high-grade mineralization is found or the shaft is abandoned[17]. Such conditions require a distinct organization of labour (commonly male dominated), typically as teams or "gangs" led by a leader (in more informal operations) or pit boss, "capita" or foreman (Channel Research, 2013; Cook and Mitchell, 2014). Importantly, such extraction requires investment by a shaft or pit owner, sponsor, financier or sufficient capacity to obtain loans or pre-financing from future buyers (World Bank, 2016; DRASPAC, 2015). These requirements only partly explain women's low participation in extraction, which is more comprehensively examined in Sections 3.2.1 to 3.2.5 alongside strategies used by the small percentage of women working in teams underground or as pit owners.

Occupational risks during the extraction phase are particularly severe and include fatalities and debilitating injuries associated with rock falls, tunnel collapses, pit wall failures, falling rock and suffocation in poorly ventilated tunnels (ILO, 1999; Hinton et al, 2008; Dreschler et al, 2010). Uncontrolled and illegal use of explosives exacerbates this risk. Estimates of an average of 6 fatalities per month due to underground cave-ins were recently voiced by the area licence holder of a Ugandan gold rush[18]. Men and boys as a group face the greatest risks, given their dominant roles in extraction. Given widespread awareness of the risks involved, this situation seems to reinforce values of masculine strength and courage, while validating social or cultural barriers to women's entry (e.g. through teams or lines of authority) in the so-called interests of protecting women (Section 3.2.2). Additionally, occupational impacts of ASM can seriously impact women's burden of work given their caregiver roles in the household and resulting time and financial implications of loss or debilitating injury to family members, thereby further impeding their capacity to take on certain jobs in the mines (Section 3.2.1).

[17] Based on the author's site visits and discussions with shaft owners in Merelani tanzanite mines (hard rock) and Rwamagasa gold mines (soft rock) in June, 2013 in Tanzania and experiences in a hard rock mining of lead and gold in western Uganda.

[18] Jonny Sasirwe, pers. comm., November, 2015.

Within extraction groups, payment is commonly based on production and typically distributed to workers via the team leader, foreman, pit boss or captain, who may or may not be a salaried employee of a mine owner (World Bank, 2016; Cook and Mitchell, 2014). Often, a captain, foreman, tunnel or team leader will take a greater share, with remaining production shared equally between team members or divided according to function (e.g. rock breaking, hoisting) after deductions[19]. In some cases, deductions can include payments to mine owners, traditional leaders, state owned enterprises or other informal "authorities" (K. Hayes, pers. comm). Where pit owners deduct *both* capital and operating costs (e.g. overburden removal, timbers, water pumps, lunch, advances), final shares to be divided amongst actual diggers can be reduced to ca. 20% or less of the total value of minerals extracted. A small proportion is additionally deducted to pay transporters who are mainly comprised of the most desperate people willing to take on arduous job for little money, as described below (Perks et al, 2015; Cook and Mitchell, 2014)[20].

In more organized operations, certain functions are sometimes paid on salary or daily wages. In Habatu Cassiterite Mine in Rwanda, women who are paid ca. $1.3/d to hoist broken rocks from great depth underground expressed a preference for a daily paid wage when compared to the uncertainty of sharing production in teams. In Gifurwe Wolfram Mine also in Rwanda, teams that are paid based on production work alongside salaried drilling and blasting teams and timbering crews, some of which are supervised by salaried women who have been trained in underground methods, including the use of jackhammers with jacklegs.

Ore, Mine Waste and Water Transport

One of the lowest paid, least regarded and most gruelling roles in ASM sites is that of transporters, who are typically comprised of the most vulnerable men, women, boys and girls of all ages working in mining areas. Mineralized soil or rocks is manually carried from extraction throughout the processing phases of ASM (see Figure 2 above) commonly using buckets, basins, burlap or rice sacks alluding to the "low cost of entry" required. At some sites, especially where extraction and processing are more closely integrated, wheelbarrows may be used but are often owned by site/pit/shaft bosses.

In many localities throughout the GLR – such as Kalehe, Mwenga and Walunga in South Kivu and in Isingiro, Uganda – many elderly women and men have been found bearing heavy loads, in some cases in excess of 50kg requiring an entire day for a single load (Perks et al, 2015; DRASPAC, 2015). In Walikale, Perks et al (2015) found many of the elderly women at the site were widows of the war and, given their inability to work in restaurants or the sex trade, were relegated to the most marginalized and lowest paid roles in the mine (e.g. transporting) resulting in a range of physical ailments.

Photo 11: "Light work" in transport.
Beliefs concerning women's ability to only do "light work" contradicts the actual nature of their work *(Photo: K. Hayes).*

[19] Although modalities of payment vary, work in extraction (particularly in hard rock) is generally one of the highest-valued, best paid jobs in the mines. At Nyabibwe Wolfram Mine in South Kivu, for instance, in May 2016 diggers reportedly average ca. $70 per week (ca. $12/d) but can earn considerably more, while those in hauling ore and crushing typically earn on the order of $0.6-$4/d to $2.5-6/d, respectively, and ground sluice operators (also a respected position) can earn $6-14/d. Constrained by beliefs concerning women's capacity to operate sluices and even pan (with the exception of a few in crushing), women are relegated to petty mineral trading, purchasing (mostly) tailings, paying sluice operators to wash them. Production below 3kg per sack can put women in debt, while above this, women earn ca. $0.5-$7 per sack.

It is frequently reported that when women and men work together in teams *performing the same function,* proceeds are equally distributed between members (the exception being captains, supervisors or foreman who, where present, often receive a greater proportion). Women, nevertheless, experience issues with debt repayment, underpayment or refusal of payment for other services (e.g. hauling concentrate, sex work) as described in Section 3.1.4.

[20] An exception to this has been observed when small teams are somewhat "self-formed" and working in less formal environments. In such cases, the team leader's role is mainly to liaise with the mine/shaft/pit owner or financier to whom they sell production and may share proceeds equally with team members (after deductions to other authorities, where existing).

Photo 12: Transporting rock.
A woman in northern Uganda hauls a stone for crushing (*Photo: J. Hinton*)

Depending on geoclimatic conditions, two or three 20L jerricans of water can be hauled for several kilometres over arduous terrain, sometimes requiring a full day for a single trip. In one Ugandan tin mine, miners expressed that fetching water is strictly women's work (DRASPAC, 2015), as found in some sites in Bemishangol Gumuz, Ethiopia, where women and girls were solely responsible for hauling *all* water used in processing (and for domestic use) with no remuneration (Solomon-Takele and Hinton, ms).

With the exception of those working within teams who receive a small(er) percentage of sales, payment for transporting materials and water is typically by weight and distance, a clear motivator for overexertion. Weights are often estimated by sack or intentionally undervalued, with some carrying up to 70kg (Perks et al, 2015), and payment per load is depressing low[21]. In Bisie Mine in DRC, when tin prices were high, transporters earned ca. $0.45/kg as distances were on the order of 50km (K. Hayes, pers. comm). At sites where processors are working independently or in small groups, they (or their children) may haul their own ore and water to carry out their work, with time spent integrated into their personal production costs.

Repeated carrying of heavy loads, often for excessive distances, can lead to chronic injuries due to over-compression of the spine, chronic pain due to overexertion and muscle strain and, in some cases resulting in permanent disability, as well as heat stress and exhaustion-related illnesses that may compromise already vulnerable health status (WHO). In particular, those most elderly, those with most compromised immune systems (e.g. due to HIV/AIDS), those suffering from malnutrition and pregnant women (given reports of miscarriage) face high risks. Children physically and emotionally develop rapidly, making them especially vulnerable to these occupational impacts, particularly if combined with poor nutrition and long working hours (Gunn and Preister, 2004; IPEC, 2005; Wasserman, 1999). Repeated carrying of heavy loads by children can result in skeletal damage, hardening of muscles in hands and forearms and thermal damage due to heat stress that can affect them well beyond childhood (ibid).

Mineral Processing

Women's and girl's main roles in 3T and gold mineral production in the GLR and across Africa are related to mineral processing (transporting[22], crushing, grinding, panning), in some cases constituting up to 90% of the mineral processing workforce[23]. Different functions are mainly

[21] Examples of low payment include as 4,000 francs (ca. $4 USD) per 50kg sack of concentrate in South Kivu, 1000 UGX (ca. $0.40 USD) per 20 litre jerrican on southwestern Uganda or 200 FBU (ca. 0.15 USD) for 50L of water in Muyinga Province, Burundi (Matthysen, 2014; Perks et al, 2015; Hinton, 2011).

[22] Although discussed separately, in technical terms, transport of water and materials within the "processing unit" (e.g. from crushing/grinding to washing/panning areas) are key components of mineral processing. Transport of ore from extraction (e.g. including hoisting material from depth) and transport from extraction sites to the "next step" (i.e. crushing or, for alluvial, washing) is considered a separate transport function. Regardless of the step at which it takes place, transport is nevertheless commonly devalued. For instance, in many sites in DRC and Rwanda it was found that where women face widespread exclusion from most production jobs (in both processing and extraction), likely given the need for cheap labour, they face no such exclusion related to work as transporters.

[23] For example, women's participation in processing was cited in Mukibiri mines in Kenya (80%), across Burkina Faso and Mali (up to 90%), in the Ingessana District of Sudan (50% in processing escalating to 90% when men go planting) and Rwamagasa District in Tanzania (50% in processing) (Wagner, 2003; Veiga, 2003; Amutabi and Lutta-Mukhebi, 2001; Gueye, 2001; Keita, 2001). These gold site statistics differ from observations at some 3T mines in Rwanda and North and South Kivu in DRC, where


Photos 13 and 14: Grinding ore before washing. *(Left)* Women purchase low-grade coltan ore and manually pulverize it using other rocks as kaolin dust fills the air at a site in North Kivu, DRC. *(Right)* Men feed coltan ore into a mill. Mines that have begun to mechanize seem more likely to use personal protective equipment (PPE) such as dust masks, boots and hard hats. (*Photos: J. Hinton)*

performed on an individual basis, in pairs or small groups, often based on familial ties or friendships, although "sluicing teams" can be found, particularly in reasonably organized, hard rock, 3T sites where some degree of investment is needed.

Crushing, Grinding, Sorting and Handpicking:

When ore is in the form of rock, it is next crushed into coarse fragments. On visual inspection, fragments deemed valuable are kept for grinding, which involves pulverizing or "pounding" rock into finer particles in order to free 3T minerals from the waste minerals to which it is attached. Crushing and grinding is done by both women and men of all ages, typically using a small hammer although, in the case of grinding, steel mortars and pestles, grinding stones or hard rocks to crush other rocks may be used (Cote, 2014; Hinton et al, 2008; Perks et al, 2015). In one Ugandan tungsten mine, manual crushing is done by male teams at the shaft entrance, rock fragments are visually inspected, mineralized stones are separated from "waste" (sometimes later scavenged by women), and viable stones are carried by team members down the hill for pounding, either by team members or paid labourers, some of which are women (Auranda Minerals, 2015).

Main occupational risks associated with crushing and grinding relate to injuries from repetitive motion, flying rock fragments that can cause cuts and wounds and in some cases, loss of an eye, and illness from dust inhalation. Advanced stages of silicosis have been documented among men and women miners in Ghana as well as children as young as 14 (ILO, 1999;). Most mineralization in hard rock 3T mines (for wolfram and cassiterite in particular) is associated with quartz comprised of silica and risks of silicosis can be high. Kaolin is abundant for coltan, tantalite (and occasionally cassiterite), posing an addition risk of kaolinosis to women and men, boys and girls involved in crushing and grinding of these ores.

Separation of Valuable Minerals and Drying Ore to Produce "Concentrate:

Whether for pulverized rock, weathered soils, tailings or sediments, 3T minerals (as for gold) are heavier than most waste minerals. The next phase in the production system is known as "separation", "washing" or "concentration" where lighter waste particles are washed away from the heavier, valuable minerals. For 3T minerals, this is mainly done by panning with a basin or calabash or using ground sluices followed by panning of heavy concentrate collected in the sluice.

women seem to constitute only ca. 5-15% of the entire workforce, and in many instances women are strangely excluded from (or present in small numbers) many processing jobs they commonly perform in other localities (see Section 3.2.2).

Women and girls generally participate in greater numbers in panning and sometimes sluicing of alluvial material or tailings, which – when compared to hard rock deposits – warrants a larger workforce (owing to the high volume of material) comprised of those willing to work for relatively low returns (owing to lower grades of gold or 3Ts)[24]. Compared to hard rock deposits, work in processing of alluvial or tailings deposits typically have a lower cost of entry (e.g. pan, water, sometimes a spade), provide flexibility to work as an individual or in pairs and (particularly in the case of alluvial or tailings deposits) often have lesser controls over entry to processing areas.

Despite operating sluices in many sites throughout east and central Africa, at a number of reasonably well organized, hard rock 3T mines in Rwanda and North and South Kivu in DRC, women are believed to be incapable of operating sluices (in some sites, even where women were found sluicing tailings and riverine sediments). In these cases, sluicing team owners (individuals or overarching company or cooperative) invest in construction of concrete lined ground sluices[25], in some cases large water reservoirs, water pumps and (where extraction was performed by independent teams) purchase of high grade, pulverized hard rock ore in addition to other costs to obtain access. In more advanced operations, processing also involves small plants comprised of crushers, mills, manual jigs and occasionally shaking tables. Reasons for women's low participation in such scenarios may be attributed to team entry requirements (Sections 3.2.1 to 3.2.3), beliefs concerning women's capacity (Section 3.2.2) and constraints associated with lower incomes and limited controls over earnings (Section 3.2.3).

Payment of processors (crushers, panners, sluice operators) in the GLR is via a number of scenarios, each with different gender implications mostly related to how work is organized and proceeds are distributed therein[19], and differentials in bargaining power, which effects sale prices

Photo 15: Panning in a spring. This water source is shared by women and men, girls and boys in Northern Ethiopia. Women and girls grind and pan their own material scavenged from waste dumps while men and boys are part of integrated teams doing extraction and processing of gold ore (*Photo: J. Hinton)*


Photos 16 and 17: Ground sluicing of 3T ore is common throughout the GLR
(Left*)* Ground sluice operators are the highest paid members of teams at this cassiterite mine in Rwanda. (*Right)* A woman operates a ground sluice in North Kivu, DRC, despite assertions by many that women are unable to do so. (*Photos: J. Hinton)*

obtained by those selling[26]. Modalities of payment include: (i) payment for crushing or panning services by weight; (ii) processors buy rocks or tailings from miners, process and sell the concentrate; (iii) processors work as part of a combined digging-hauling-processing group (e.g. team) that typically sells directly to the cooperative or through their group leader; (iv) processors may work as individuals, small groups (2-3 people) or be members of a group that handpicks from stones in waste rock or digs small near-surface excavations with product sold as individuals to buyers or through the group leader (DRASPAC, 2015; Hinton, 2016).

Mineral Trading

When a company, cooperative or mine owner is present, as is common in parts of DRC, Rwanda and Uganda, 3T concentrate is generally sold to them for upgrading, often using semi-mechanized processing (Bloor, 2011; Dreschler et al, 2010; Auranda Minerals, 2015). In the absence of this, concentrate is sold by miners (or via their leaders/cooperative heads) to other miners, mine/shaft/pit owners, or local buyers, who buy small quantities, aggregate and then sell locally or in bigger centres. Local buyers may also be agents tied to a certain higher-level buyer (*negociant*) or independent petty traders and many trade alongside other economic activities (e.g. run small shops, mining activities).

In a few cases, these often-vilified "middlemen" are actually "middlewomen"[27]. Women act as mineral traders across eastern DRC, although in much lower numbers than men, as in Kalehe, Mwenga and Walungu, where 25% of traders are female (Perks et al, 2015). In Uganda, both women and men engage in mineral trading often in conjunction with other jobs (e.g. as school teachers, local government workers, small restaurant owners), although this seems more common for easily transportable and readily sellable gold rather than 3Ts (Hinton, 2011). In Nyabibwe in South Kivu province, DRC, Bashwira (2013) described the *shashulere,* who act as intermediaries between artisanal miners and mineral buyers (*negociants)*, the latter of which sometimes advance

[26] Earnings seem to vary widely according to role (panning, crushing, sluicing), organization of work, modalities of payment, the mineral and the grade of material. For instance, in Rubaya, North Kivu, women individually sluicing and panning coltan-bearing *tailings* report earning on the order of $0.3-0.5/d whereas men on sluicing teams processing *ore* each earn ca. $5-8/p/d[26]. In both cases, tailings or ore can yield negligible or nil production, although in the "team" scenario, sluicing unit owners sometimes advance cash to team members and deduct loans from future production. In Katugota Mine, South Kivu, women providing panning services can earn up to $2.4/d while women and men providing crushing services earn ca. $0.6/d.

[27] Traders are often presented in the ASM discourse as exploiters of un-knowing or desperate miners and therefore cited as one of causes of their persistent poverty. Although exploitative pricing has been documented in many sites (particularly where competition between buyers is low), the situation is far more complex. In most cases, it is uneconomic for most miners to bear the cost, time and personal risk of transporting their individual production to high-level buyers. Profit margins can be extremely low (e.g. 3-5% of value for gold traders in Uganda) and the activity is often only viable at high volumes. In some cases, traders provide loans, advances and equipment to miners in hopes they will agree to sell to them rather than competitors, some of whom report debt and economic vulnerability as a consequence. Particularly in the absence of formal markets (including government buying centers which only seem to have succeeded in a few jurisdictions (see Hinton and Levin, 2011)), traders play critical roles in the system.

them with cash to do the buying for a fee. Women traders in Nyabibwe were found to play critical roles in the trading system, by purchasing material with differing values depending on the different step in production when it is acquired (e.g. ore; crushed ore; concentrate *or* tailings from primary, secondary or tertiary washing) and paying for services of mainly men workers to perform subsequent steps in processing.

However, given that both material and services were paid by the women, but mineral content (and real value) varies widely, these petty traders bear *great* financial risks, reporting debt and, in some cases, imprisonment for unpaid loans to negociants and other financiers[28]. However, in other ASM areas (e.g. at Rubale in Uganda, Katogota in South Kivu), some site-level women mineral traders have accrued sufficient savings to purchase their own pits, even when they are restricted from supervising their own underground operations without assistance from a man.

Photos 18 and 19: Women Traders
(*Top)* A woman trader weighs gold dust in Ethiopia *(Photo: J. Hinton)*.
(*Bottom)* Women in Nyabibwe, DRC, buy material at different steps in the process and pay men to process it. (*Photo: J. Hinton)*

The presence and number of higher-level intermediaries in the chain (i.e. aggregating production from multiple mines) seems to depend on mineral, production volumes and remoteness of the mines. The most lucrative position in the supply chain is held by higher-level buyers, most of whom are men typically located in urban centres (e.g. Kampala, Goma, Bukavu, Kigali), who purchase and aggregate production from multiple mines. These *comptoirs* or exporters, who may also be mine owners, are often powerful, wealthy, well-connected and, in some cases, are members of families with long histories in mineral trading. In Rwanda, it was found that ca. 20% of export value of 3Ts is passed on to exporters, amounting to profits (after taxes, costs, external due diligence) on the order of 3-7% of the export value of cassiterite and wolframite and 3-4% of coltan, a substantial amount given export volumes (Cook and Mitchell, 2014). By comparison, shares to mine workers, amounted to 40-44% and cooperatives yielded 30-44% (before operating costs) (ibid)[29].

Sale prices vary between minerals, mine sites, regions and countries but are generally determined on the basis of (World Bank, 2016; Matthysen, 2014):

- *International market prices and foreign exchange rates.* For example, in light of the fall in cassiterite prices, combined with worsening forex rates, the ground price at one mine in southwest Uganda dropped from about 40,000 Ugandan shillings (UGX)/kg (ca. $13/kg) to 20,000 UGX/kg (ca. $5.80/kg) over the course of a year (DRASPAC, 2015).
- *Remoteness,* which often reduces the number of buyers (and therefore competition) but increases buyer's costs for transport, security and time spent reaching bigger centres.

[28] For example, in 2016 women in Nyabibwe report buying tailings for ca. $10 per sack, which typically yields between 0-5kg of wolfram concentrate sold at ca. $3.5/kg. If $0.6 is paid to sluice operators, then over 3 kg of concentrate (an extremely high grade for tailings) must be produced or the trader is in losses. Notably, some women reported almost complete exclusion from mine sites when cooperatives were established and advocacy efforts to gain access as traders, with only a few women observed performing roles other than in trading and providing non-mining related goods and services.

[29] When extrapolated even further downstream, if the international tin price was 20,000 USD per tonne and a mine yields concentrate grading 60% cassiterite (valued at $12,000 per tonne), miners paid ca. $5-6 per kg earn 42-50% of the value of the final, processed product sold after smelting in Asia (K. Hayes, pers. comm).

- *Pre-financing or loans have been provided,* specifically, whether a price has been set in advance where pre-financing has been provided or when loan payments are deducted.
- *Capital and operating costs are considered,* for example, if a miner sells to a mine or pit owner, he/she may pay a lower price to account for his/her costs or food, accommodation and medical care spent on the team from which he/she is buying and (as found in some mines in DRC), capital investment costs (e.g. water pumps, overburden removal)[30]. In formal, organized settings (e.g. Rwanda), the captains may make additional deductions for his/her services or providing safety gear in advance to miners (Cook and Mitchell, 2014).
- *Quantity, grade and impurities.* Grades in concentrate (or tailings and ore, when purchased and processed by local traders) can vary widely within deposits and between mines[31]. In many cases, it is difficult to estimate the purity and value in the absence of laboratory analysis or (in the case of tailings and ore) prior to processing.
- *Negotiating power.* Women's relative position in many communities, sometimes combined with limited experience in valuing minerals, lack of understanding of the previous factors and comparatively lower levels of confidence can result in lower sale prices.

Across the phases of mineral production and trade in the GLR, women face serious difficulty in obtaining the most lucrative jobs in the mining system, including in positions of authority, in extraction, work in teams (especially where semi-mechanized methods are used) and in trading. In some localities, their exclusion sometimes even extends to processing (crushing, sluicing and, in some cases, even panning), the mainstay of their work in ASM around the world. Implications for their roles in decision-making concerning mineral resources and benefits derived from them are obvious. Lack of resources (e.g. tools, skills, money) seems to be only one factor and the situation is far more complex. This is analysed further in Section 3.2 in the context of the following sections.

3.1.2 *Other Production and Trading Systems*

The numerous spin-off micro- and small- enterprises that emerge in and around mining areas – including those that create new markets for local agricultural and other products – can theoretically make a significant economic contribution[32]. Given this, ASM is increasingly recognized for its potential to *stem* rural-urban migration through direct and indirect provision of non-agricultural employment (Henstchel et al, 2001; Hinton, 2005). The economies and communities that emerge around different types of ASM scenarios have different gender implications. Where trading centres and towns around permanent ASM have become settlements with diversified economies, drivers for out-migration may diminish as different types of jobs arise for both women and men, although little research provides insight into the ways in which women and men differently benefit from this transformation. In general, non-mining livelihoods in ASM receive cursory mention in most ASM literature, thus the broader contributions of ASM to poverty alleviation and its gender dimensions are not well documented in the GLR. An evident gap in the discourse concerns the ways in which women and girls can or are constrained from entering and leveraging jobs in the broader economy to improve their circumstances.

In remote sites in particular, where economies form and rely heavily on ASM, women and girls can make up a significant proportion of the non-mining workforce. For instance, in Tanzania, at least 2.5 times more women work in goods and service roles supporting but not directly involved in mineral production (Dreschler, 2001). At ASM sites surveyed in the Kivus, 53.7% of females surveyed worked as food venders, compared to only 5.6% of males, the largest number of which worked in mining (63.5%) (Perks et al, 2015). Notably, males took up 75% of "other" occupations,

[30] In many gold and 3T sites, digging team members often receive a share of ore or production after production costs (food, timber, fuel for generator) are deducted.

[31] For example, in Ngozi, Burundi, tungsten grades average 40-50% in concentrate, whereas in Nyamuliro Mine, Uganda, grades are ca. 68% (Channel Research, 2013; Auranda Minerals, 2015). The impurity of biggest concern for 3Ts are radioactive elements, which receive a lower price internationally based on concentrations. Presence of arsenic in tin is also an important issue as this attracts financial penalties for exporters.

[32] For example, in Uganda Liberia and Central African Republic (CAR), respectively, it was estimated that over $327 million, $28.9 million and $13.5 million USD were injected into economies where local artisanal miners spent their revenues (Hinton, 2009; Hinton, 2010; Hinton and Levin, 2010).

Photo 20: ASM Economies. Earnings from ASM support development of micro- and small- enterprises and create a market for locally produced agricultural products. Women play critical roles in development of these economies (*Photo: J. Hinton)*

which may include local shop and restaurant owners, local transport (e.g. "boda bodas") and other functions suggesting narrower opportunities and differential constraints faced by women and girls. In tanzanite-reliant Merelani, Tanzania, a number of women do own shops, restaurants and even hotels, reportedly leveraged from their activities in petty tanzanite trading or work in other jobs (e.g. local government), but this community has evolved over decades and has some semblance of formal, functioning systems (Hinton and Wagner, 2011), which may account for this difference.

In many localities, a common strategy used by women's and girl's is concurrent reliance on multiple jobs, e.g. in mineral production, petty trade, vending goods and sex work, presumably as a means to augment incomes (Perks et al, 2015; Hinton and Mbabazi, 2009)[33]. Perks et al (2015) found in eastern DRC communities surveyed that 38.1% of women had reported trading sex for money at some point but only 20.1% reported sex work as their profession. Approximately three quarters of women involved in sex work did so because of poverty, with one third citing a failure to get other jobs; ca. one fifth of women engaged in sex work as it was more lucrative than other jobs (ibid). In areas of Katanga, women report routinely trading sex for mineralized sand to wash at processing sites.

The growth of the sex trade, particularly in rush and shock-push ASM scenarios, is well documented around the world (Eftimie et al, 2012; Lahiri-Dutt, 2008; Hinton, 2003). Large

[33] In Kalehe, Mwenga and Walungu in eastern DRC, Perks et al (2015) found that men also undertake sex work but in much lower numbers, with 1.3% engaged in the profession and 7.2% having traded sex for money at some point. Notably, 93% of women and 100% of men engaging in sex work stated that they worked for themselves (ibid), suggesting the trade may afford some degree of autonomy.

numbers of men (married or otherwise) flocking to such areas with readily disposable cash in hand combined with widespread alcohol and drug use create an ideal market within which the sex trade can flourish. In such environments in particular, entry of young girls into the trade, in some cases starting with the onset of puberty, provides great cause for concern and is a phenomenon requiring urgent intervention. Even in less volatile, established ASM communities, the trade is pervasive. Despite recognizing their wives contributions to family wellbeing, when queried, men mining a range of commodities (limestone, salt, gold, tin) explained that regular visits to their "*malayas* (paid girlfriends in local bars)" were justified because their wives work in mining made them less attractive, "*aging quickly*" and resulting in "*harsh, calloused hands*" (Hinton and Mbabazi, 2009).

The stigma of sex work can make the return to homes, families and communities difficult (Hayes and Perks, 2012; Perks et al, 2015), potentially anchoring women and girls to this job longer than expected. However, the view that sex work is an act of agency and a reasonable livelihood strategy under such conditions is receiving greater examination in research (Lahiri-Dutt, 2008). Surveys by Perks et al (2015) in the Kivus, 18% of women entered the activity because it was more lucrative than other options and 93% of sex workers worked solely for themselves.

Because of links between sex work, SGBV and its significance as a strategy for obtaining and maintaining different jobs in ASM communities, this is explored further in Sections 3.1.4 and 3.2.2. As discussed in Section 2.2.3, research on the impact of the dynamics of ASM (cycle of extraction and depletion, commodity price influences) would aid in understanding the different ways that women and girls cope through mining and non-mining livelihoods.

3.1.3 *Intra-Household Dynamics and Decision-Making*

In ASM communities around the world, women and girls of all ages are primarily responsible for meeting the needs of household members, yet often experience the greatest negative impacts and have the least bargaining power needed to influence decisions that affect their lives and the lives of those who depend on them (Cote, 2014; Lahiri-Dutt and MacIntyre, 2006; Eftimie et al, 2012). While this section outlines general findings concerning these dynamics, it is important to recognize that *within* households, different women and girls occupy different positions (e.g. household heads, primary breadwinner, spouses, biological, adopted or dependent children, house help, first wives, second wives, etc), resulting in much heterogeneity in terms of power and influence. The current ASM discourse provides few insights, thus findings presented are quite general in this respect.

Women's limited participation in decisions about use of household income, including when women's earnings are turned over to their husbands or other male household heads, is frequently cited, including in ASM sites in Orientale and South Kivu Province and in six ASM areas in Uganda (Côté. 2014; Hinton and Mbabazi, 2009; Hinton, 2016). Although some men entrust responsibility for family finances to their wives, quite often as one Ugandan women miner stated, "*men take charge of the financial resources in the home so they control and own money, land, buildings and everything*" (Hinton and Mbabazi, 2011: 48). At an international women in mining conference, one woman gold miner echoed these sentiments: "*We aren't even free to decide how many children to have... women are always under* (the control of) *the husbands*" (World Bank, 2011).

Cultural beliefs and practices are often closely intertwined with dynamics in the household and reinforce inequitable power relations therein[34]. Examples include: barring women and girls from eating chicken, eggs and the best parts of meat in Orientale; requiring a widow to marry her deceased husband's brother (a common practice among several ethnic groups in South Kivu and other parts of the DRC); or practicing the right of "*cuissage*" where traditional chiefs exercise their right to requisition sex, commonly with young virgins (Cote, 2014). Implications for women's agency are evident, particularly when community leaders reinforce such beliefs with statements such as "*There are no women in the mines that belong to a particular person – so every woman belongs to the whole world."* (Perks et al, 2015: 19). The fact that, in neighbouring Uganda, many

[34] Cultural taboos reinforcing where limits to women's participation, power and benefits from mining are found across the GLR, most of which pertain to women's role in making minerals disappear and other types of devastating mine related problems. These are discussed in the context of access to certain jobs in the mines in Section 3.2.2.

similar customs existed but have been outlawed (e.g. widow inheritance) or are no longer in common practice (e.g. restrictions concerning certain foods), warrants research into different factors that may be shifting these cultural norms (e.g. implications of a comparatively well-functioning state, massive girl-child education campaigns)[35].

Cultural norms and beliefs are further operationalized by way of norms requiring women to obtain "permission" from their husbands (and approval from authorities, family and others) in order to take on certain jobs or even any form of paid work. In South Kivu, domestic responsibilities (e.g. pregnancy, child care, etc) were provided as a justification to deny women jobs (Perks et al, 2015), while in a tin mine in Uganda, women voiced that husbands often opposed work in extraction because they thought they would engage in sex with other miners in such a male dominated environment (DRASPAC, 2015). Rwandan women indicated they face broad opposition from family and community members who similarly equate their jobs in the mines with sex work, and suggest that this may be a factor in the pervasive phenomena whereby, once a women miner marries (particularly if their spouse is a non-miner), they quit working in the mines to take on more traditional roles in the household[36].

Threats to prevailing power structures in the household provide further justification for this opposition, as expressed by an authorities in Rubaya, DRC who suggest *"if she makes too much money* (working in mining)*, she will leave her husband"* and *"if they become too money minded and leave the mine, won't they become prostitutes?"* In Rwanda and eastern DRC it was broadly observed that, even where men in positions of power (miners, CSO leaders, government officers, company management) recognized the *theoretical* need to empower women in mining, they often clarify such statements by suggesting that women would actually be better off working in the home, farming (or at best doing other commercial activities) while their husbands should be responsible for financially providing for the household (Hinton, 2016). Ironically, the same individuals almost invariably assert that men are more likely to spend their time and money on alcohol while women are more likely to invest earnings to address household and family needs (reaffirming again that women's real value is essentially in the home, leaving little space to be anything else while contradicting beliefs that men should be sole financial providers). The desire to give women a few opportunities (but not enough to economically empower them) was similarly expressed by two woman mine leaders in one DRC site who both independently referred to kindly giving women manual crushing jobs so they could *"make enough to buy some soap,"* affirming that both women and men can reinforce beliefs constraining women's empowerment.

Even when women are positioned as household heads, their ability to exercise agency can be constrained by norms, practices and in some cases laws requiring men to take on authority roles. For instance, in Kolwezi, Katanga province, women who were widowed, abandoned or divorced needed a male "intermediary" in order to acquire certain assets (e.g. land) (Perks, 2008), and in Merelani, Tanzania, women household heads also rely on a "brother in law" or *shemeji* to access land and mining claims, which can put many women at risk of being swindled (AMDC, 2015; Hinton and Wagner, 2011). The status of being husbandless (by whatever means) may increase vulnerability in many ways but may also yield benefits derived from increased freedom[37]. During a 2011 International Gender and Mining Workshop in Dar es Salaam, Tanzania, a number of women miners expressed that – although single, divorced and widowed women often face social stigmas or

[35] Although policy, law and institutions can help shift harmful norms, in many cases cultural norms continue to supersede these efforts. For example, in Uganda, traditional elders commonly counsel women to stay in marriages, in some cases even where extreme domestic abuse is taking place (Hinton and Mbabazi, 2011) and, in many GLR countries, inheritance rights in law continually to be overridden by the local custom of transfer to sons or brothers of deceased men, rather than their wives (Côté, 2014; ibid).

[36] This widely reported phenomenon has been identified by some companies as a challenge to their efforts to invest in, train and promote women in their operations. Unless addressed, Rwanda's target of 30% women's employment in the mining sector by 2020 is unlikely to be achieved.

[37] For example, in Ghana, one mother who had been abandoned by her husband voiced that her equally poor family members could not assist her and therefore could not oppose her work in mining, which enabled her to care for herself and her baby (AMDC, 2015). In the Kivus, women reported migrating to mining areas more so than men and, once entrenched in the sector, single women were especially likely to move regularly between mining towns, alluding to their freedom and agency to do so. (Perks et al, 2015).

Photo 21: Strength in Numbers?
In some cases, women *may* have increased bargaining power in the household when they participate in ASM in greater numbers, perhaps owing to increased visibility of their work in ASM (*Photo: K. Hayes)*

rejection by families – they and their children may actually may be better off, mainly as they felt their ability to spend money they earn as they wish led to better decisions. Many unmarried women miners in Rwanda similarly expressed freedom to make decisions concerning use of their earnings, but reaffirmed that most young women miners were expected to leave the mines upon marriage.

Shifts in household bargaining power may be more prevalent where women constitute greater numbers in the workforce, as found in Keana, Nigeria, where 100% of salt miners are women who are heralded for sending their children to school, or in the Laroo stone quarry in Gulu, Uganda, where over 50% of the workforce are women, with many reporting their incomes has given them more power in the household (Onuh, 2002; Anon, 2004). Similarly, in two 3T mines near to Kigali, multiple married women expressed how they were able to convince their husbands to allow them to continue working in the mines by citing their contributions to the family. This included payment of school fees, health insurance, home improvements, land and livestock purchases and their capacity to pay labourers to undertake their traditional cooking, cleaning and farming roles. Although these demonstrated achievements were viewed by a number of women as key to shifting negative mind sets of family and community members, overwhelmingly, women interviewed at multiple sites in Rwanda and North and South Kivu who managed to achieve more prominent positions in mining areas (negociants, cooperative leaders, pit owners, small business owners) seem to recognize risks of challenging the status quo in male-female power and affirmed the need to be "*strategically humble*" and underplay their success.

Although not much is known about differential power of women and girls holding different positions *within* ASM households (the exception being women as household heads), the above findings attest to the influence of drivers outside of the household (e.g. cultural norms, practices, capacity to earn and control incomes), on women's bargaining power within the household and mutually reinforcing relationships between them. Although when women hold positions as household heads they may face greater vulnerability, in cases where they have greater freedom to exercise agency women may be better positioned to challenge gender relations within and outside the household.

3.1.4 *Human Rights and Livelihood Implications of SGBV*

SGBV in the context of both conflict and relative security yield additional insight into the ways in which the subordination of women, girls and other vulnerable groups are perpetuated in the GLR.

SGBV associated with Conflict and Ethnic Strife in the DRC

Conflict has been well documented in the GLR since the proliferation of slavery and trade in ivory, salt, timber, gold and other commodities in the 16th century, throughout the colonial era and the despotic regime of Mobutu, Idi Amin and other regimes (see Annex 2). In the successive wars and complex, ethnically and economically charged conflicts that continue to persist, rape has become an endemic weapon of war and a tool to terrorize the population'[38] (Côté, 2014; Hayes and Perks, 2012; Mechanic, 2004; Nailu, 2015). Not all victims of rape are women and girls. Surveys in North and South Kivu and Ituru Districts found that women and men were both victimized by sexual violence, at rates 39.7% and 23.6%, respectively, in some cases also perpetrated by women (Johnson et al. 2010 cited in Hayes and Perks, 2012).

[38] During the height of conflict in 2006-7, Peterman et al (2011) extrapolated a small dataset to suggest that on average 48 women were raped every hour, and over 400,000 women aged 15-49 had been raped within a 12-month period. While such statistics should be used with caution, the magnitude of the violence is nevertheless astounding.

While armed groups have undoubtedly been key perpetrators, SGBV *within families* has become an increasingly prominent issue. This has been linked to men's lack of control during the prolonged conflict and violence, representing a challenge to their traditional masculine roles (e.g. as breadwinner, sole household head), the response being use of violence and rape as a means to "*restore feelings of control*" (Mechanic, 2004:4). Similarly, Kelly, Greenberg et al (2014) found that labour trafficking, forced marriage and debt bondage in DRC is not attributed as much to armed groups but rather family members, mining bosses, other miners or government officials. Given the horrors experienced during periods of unrest, some forms of SGBV (e.g. discrimination, exploitation, humiliation) may be viewed as minor or even normal. In one currently secure territory of North Kivu, one woman miner expressed that women weren't subject to sexual violence by men at the mine site, stating somewhat casually that *"they only beat us."*

Photo 22: Boys and Girls around Mines
Both boys and girls can be susceptible to SGBV in ASM areas. (*Photo: J. Hinton)*

Abject poverty of women and girls likely plays a role in resignation to (and limited capacity to seek recourse for) incidences of SGBV[39]. Such desperation can additionally aggravate circumstances driving poverty further, with particularly grievous impacts on children and girls in particular. At ASM sites in Orientale and South Kivu Province, Côté (2014) described instances of women with many children who have "*sold their daughters for the equivalent of two cartons of cigarettes*". Practices in secure, stable areas provide insight into the degree of vulnerability of boys and girls in conflict and post-conflict areas. For example, in Katanga Province, Hahn et al (2013) documented widespread incidents of precocious pregnancy in mines. Girls impregnated soon after the onset of puberty are compelled or forced to marry, which is illegal albeit recognized by customary law. These marriages rarely last but, given the quasi-adult status imposed by motherhood, these girls and young women (most of whom have been evicted from their maternal homes) are thrust into roles as sole providers. Many resort to mining or sex work, in some cases falling pregnant again. Where girls remarry, existing children are often rejected by the new spouse and sent to relatives, where they often hold little value in the hierarchy and are vulnerable to child labour, trafficking and abuse (ibid; K. Hayes, pers. comm).

Women, men, children and youth – both victims and former combatants – who migrate to the ASM sector in seek of a refuge from economic destitution, violence, insecurity and fear in conflict areas undoubtedly carry with them the indelible impacts of physical and psychological trauma, stigmatization, breakup of families, sexually transmitted diseases including HIV/AIDS, displacement and abject poverty (IOC, 2014, Côté, 2014; Mechanic, 2004). As such, those who have suffered the trauma of war, insecurity and conflict (and widespread SGBV in its aftermath) may be even less equipped to challenge and more vulnerable to the systems of power and authority they encounter on arrival in ASM communities. Children and, in particular, girls who may be thrust into early marriage or the sex trade at an early age, face an especially precarious fate.

Multiple forms of SGBV across the GLR

In peaceful situations, SGBV is often perceived to be associated with domestic physical violence by spouses. In a 2006 survey in Uganda, 70.2% of women and 59.3% of men felt that husbands are justified in hitting or beating their wives for one or more of the following reasons: the wife burns

[39] For example, in the aforementioned North Kivu example, women consulted report earning $0.3-0.5/d and few options exist for alternative work. In this site, widespread misinterpretation of a law prohibiting pregnant women in mines has, in many cases, arbitrarily extended to all women and women miners – many of whom are divorced, widowed, single or abandoned and primary providers for their children – are at great risk of exploitation by miners and mining authorities and ill-equipped to take action to incidences of abuse (particular where authorities may be friends with or outnumbered by perpetrators).

the food; argues with him; goes out without telling him; neglects the children or refuses to have sexual intercourse with him (UBOS, 2007). Normalization of violence against women and girls seems to begin early. In parts of DRC, Pact has found that parents tend to physically punish girls more than boys, resulting in a general acceptance of the practice (K. Hayes, pers. comm). Although SGBV by spouses, parents and caregivers in the household is believed to be pervasive in both conflict and non-conflict regions of the GLR, Perks et al (2015) found that, in South Kivu, women who were divorced, widows or displaced persons were actually at greater risk of sexual violence than married women. This affirms that SGBV can be perpetrated by anyone, often those in a greater position of relative power, authority or social status. In ASM, this can include mining bosses, other miners, security forces around mine sites, local officials, traditional leaders and even family members.

SGBV is actually comprised of multiple forms of physical, social and psychological forms of violence on the basis of gender. In addition to rape and physical violence (e.g. beatings), SGBV further includes sexual harassment, acts of intimidation or humiliation, discrimination or denial of opportunities, exploitation, confinement, neglect and early marriage, among others. For example, in Orientale and South Kivu Province, Côté (2014) cited discriminatory practices of men cheating vulnerable women by not paying debts for goods or services and incidences of public body searches of women by men at the end of each shift to ensure no theft of gold.

Little is known about strategies used by women to counter this. In Merelani, Tanzania, women reportedly recruited a *shemeji* (brother in law) to protect them from violence, particular when demanding dues from predominantly male customers and when travelling the 7 kilometres

Photos 23 and 24: The prevalence and nature of SGBV can differ between localities and contexts. *(Above)* Approximately 90% of the mine workforce in this gold site in Oromia, Ethiopia is made up of ca. 800-1000 men and boys (who mostly migrated from other areas). (*Photo: J. Hinton)*
(Left) One of the extraction areas in a cassiterite-reliant community in South Kivu, DRC. The workforce is mainly made up of women and men from the local villages and nearby trading centre.

between the mine site and town. Disturbingly, the *shemeji*'s have been known to demand sexual favours in exchange for such protection (Hinton and Wagner, 2011). In one secure mining area in North Kivu, women miners who were queried about physical assault perpetrated by men miners report that on-site mining police are largely ineffective as they are either drinking partners with offending miners or are outnumbered by drunk male miners so don't take any action. Affirming their limited options for recourse, one DRC NGO leader, "*there is no justice for women",* referring to the lack or low quality of services and heavy reliance on traditional means of resolution.

The prevalence of both grievous (sexual and physical assault) and more insidious forms of SGBV (e.g. harassment, verbal abuse) may be lessened at more formal, organized mine sites with professional systems, rules and policies in place. For instance, at Gifurwe Mine in Rwanda, where multi-pronged strategies have been instituted by the company[40], some women miners report that their main problem with men relates to joining a team, alluding to discriminatory practices. Despite much more established government structures (e.g. special units at police stations) in Rwanda and Uganda, SGBV in the domestic sphere nevertheless is believed to go largely unreported or addressed via traditional means (Section 3.2.3).

Links between SGBV in the household and gender relations were well captured by human rights activist, Françoise Nduwimana (Mechanic, 2004: 4): *"Violence is a way to dominate, and you can only dominate someone if you have more power, more rights, and more status."* Although forms of SGBV, perpetrators and pervasiveness may vary, SGBV ultimately perpetuates the subjugation of vulnerable people, especially women and girls. A major challenge, however, exists wherein gains made by women and girls in challenging power relations can actually serve to increase the likelihood of SGBV as the control of those in authority is undermined and related norms are threatened.

SGBV as Justification for Exclusion or Motivation for Empowerment

Numerous advocacy organizations have advanced the narrative that mineral exploitation is the primary cause of violence in DRC and the main result is SGBV – rape, torture, sexual slavery, forced prostitution and others – against women and girls (Bashwira et al, 2013). This, coupled with occupational risks associated with different aspects of mine work, has led to protective or exclusionary legislation, such as banning all pregnant women from work in the mines in DRC, Rwanda and (currently proposed in) Uganda.

Particularly in DRC, where specifics aspects of the law seem to vary between provinces and even territories, interpretation and implementation has been arbitrary, with dire consequences for women trying to work at and even access mining areas. In many sites, pregnant women are banned from *any* aspect of production and trade (including petty mineral trading and selling goods on-site). Mining police in some areas seem to have applied the legislation to *all* women. In at least one instance the ban has been arbitrarily extended by local authorities to include "older women" and, in other sites, breastfeeding women are banned.

In many localities, the misguided enforcement of this law seems likely to be used as a means for mining authorities to extort money from women miners seeking access to areas, provides a justification to abuse them physically or verbally and generally seems to increases women's vulnerability further. In both Rwanda and DRC, the implications of the resulting financial hardships caused by this exclusion or expulsion can be severe, ranging from failure to pay school fees to malnutrition of women and their children. As stated by the Chairwoman on the cooperative of women traders in Nyabibwe "*they* (pregnant women) *mostly just stay at home. They have nothing.*" Given that significant proportions of women miners are single, divorced, abandoned or widowed, loss of livelihoods during pregnancy seem to heighten rather than ameliorate risks[41].

[40] Efforts have included campaigns with local leaders to mobilization and recruit women; training of women, including in use of jackhammers with jacklegs in underground mining, promotion of women to supervisory positions, establishment of and awareness raising of workers in communication channels (through hierarchy of management) and women's suggestion boxes, and efforts to organize women workers.

[41] The law lacks clarity in terms of the progress of a pregnancy (e.g. no. of months along), responses/consequences for violations of the law and responsibilities of companies/cooperatives in providing suitable facilities (e.g. breast-feeding or child

Photo 25: Issues of Alternatives and Choice
Women in this coltan mining area in North Kivu, DRC face challenges accessing mining areas but report that they earn much less as hired farm workers. (*Photo: J. Hinton)*

Thus, the paternalistic vision of "what is best for women" (as exemplified by the way in which protectionist legislation has been devised and meted out) contradicts women's expressed interests concerning "what is the best for themselves". This is similarly demonstrated by the proliferation of programs seeking to push women into alternative livelihoods without consideration of women's goals, priorities and the agency they employed that brought them to the sector in the first place. As examined in Section 2.1.2, the decision of women and men to engage in ASM as a livelihood strategy is a rational response to the circumstances in which they live and options available to them.

In ASM communities in South Kivu, the younger generation, in particular, expressed hesitation to return to agriculture (Perks et al, 2015), and many affirm their desire to continue working in ASM (Côté, 2014). When queried about their interests, needs and priorities, many women miners in Uganda express an interest in "moving up" but not "moving out" of ASM (DRASPAC, 2015; Hinton and Mbabazi, 2011), a sentiment that was widely reaffirmed by many women attending a 2015 UN Women Gender Sharefair in Nairobi. In recent research at six 3T mines in Rwanda and North and South Kivu, DRC, women miners expressed interest in different jobs at the mine and some cited how mining revenues enabled them to invest in small businesses alongside their mine work. Overwhelmingly, most took the view that work in the mine provided the most money compared to other work.

The emergence of multiple schemes aligned with the OECD Due Diligence guidance has potential to advance women's livelihoods while, if sensitively designed, countering SGBV. Specifically, compliance requires auditing and responses to "*serious abuses associated with mineral extraction transport and trade*"[42]. A 2013 assessment in Burundi reported found no evidence of any "serious abuses" in ASM areas (Channel Research, 2013), but the work didn't seem to prioritize sexual and domestic violence, discrimination, exploitation and other forms of SGBV, suggesting a clear need to improve assessments and compliance audits. The Local Mining Committee overseeing iTSCi compliance in Rubaya, North Kivu, agreed that incidences of SGBV fall under the category of serious human rights abuses but admit they lack measures to identify and address these issues. As described in Section 2.3 (and affirmed by success in iTSCi's reporting scheme), the ICGLR whistle-blowing mechanism could theoretically providing a means to identify, document and monitor incidences of SGBV but it is yet to be established, its design requires high levels of sensitivity and its effectiveness in countering more insidious (and unreported at "the best of times") forms of SGBV is uncertain. Entry points also exist within ICGLR member state commitments to end SGBV and mainstream gender in the minerals sector, but implementation appears to be slow[43].

Corresponding actions should be formally incorporated in legal and institutional reforms if these commitments have any chance of being translated from paper to action. In any event, a fully

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care) for women workers. Health risks to the foetus was seemingly the justification for the introduction of the bans but the law seems to be not informed by any means of occupational and/or health risk assessment. Indeed, any thorough assessment and comparative analysis of risks would likely indicate that jobs such as panning, hauling light loads and, in more organized, semi-mechanized operations, working with shaking tables or feeding vibrating screens (particularly in the absence of dust and noise generating crushers) presents a far lesser risk to the unborn child and mother than hauling 50 to perhaps 100kg loads for several kilometres up and down hills, hoeing or harvesting fields and extreme malnutrition due to impoverishment.

[42] Among those abuses include: torture, cruel, inhuman and degrading treatment; forced or compulsory labour; worst forms of child labour; other gross human rights violations and abuses such as widespread sexual violence; and war crimes, serious violations of international humanitarian law, crimes against humanity, and genocide (Channel Research, 2013: 4).

[43] ICGLR Guidelines on Mainstreaming Gender in Minerals Policy provide detailed guidance to governments for policy, legislation and institutional measures and further identify means to align mining sector strategies with other proposed SGBV work plans.

integrated approach involving both men and women from the mine site and community upwards to highest policy making levels will be needed to effectively challenge the harmful gender relations that perpetuate SGBV. Recommendations presented in Section 5 seek to support this shift.

3.2 Reinforcing and Challenging Gender Relations in ASM

This section examines gender dimensions of ASM in the context of its four mutually reinforcing dimensions of gender relations. This section draws from key findings in the previous section and seeks to identify critical connection with and between: (i) gender division of labour (exploring the intersect between commercial, domestic and social spheres); (ii) norms, values and beliefs; (iii) access to and control over resources; and (iv) decision making power in the broader context, i.e. the role of collective action in advancing (or hindering) women's and girls' voices.

3.2.1 *Gender Division of Labour*

As described in Section 3.1.1, women are often constrained to lower paying jobs in 3T mines, with the highest paying positions (aside from management) involving work in extraction and on sluicing teams, which are largely dominated by men. Although trading is often viewed to be a "step up" from manual work, women who work as petty traders take big financial risks and often work at a loss. In Nyabibwe, the purchase and labour costs are sometimes advanced by the negociant and – given that many sacks can yield next to nothing – many women have gone in to debt to their lenders, in some cases being imprisoned for doing so, or have sold off their personal assets. While multiple factors are at play, beliefs held by both women and men concerning women's physical and technical capacity to undertake certain jobs seem to be the most significant factor constraining women's access to different jobs at the mine (Section 3.2.2).

Alongside their commercial roles, women and their daughters typically have intensive domestic responsibilities. In many ASM areas, women miners commonly work four to eight hours more per day than men, generating a range of physical and psychosocial health and other impacts (Eftimie et al, 2012). Domestic responsibilities have been used as a justification to deny women jobs (Perks et al, 2015) and undoubtedly hinders time available for work in the commercial sphere.

Environmental degradation arising from ASM activities can have additional, far reaching gender implications on women's work burdens. In many ASM communities, mining and human waste is often haphazardly discharged, often in rivers and streams, forcing women and children to travel even greater distances for clean water sources or exposing them and their families to a range of illnesses and waterborne diseases (Hentschel et al, 2001). Deforestation can impede collection of fuelwood and medicinal plants and further exacerbate siltation of rivers (Peterson and Heemskerk, 2001). Large tracts of farmland can be excavated for mining or become waste dumps, often with compensation paid to the "land owner", oftentimes the male household head, but with negative consequences accrued to women, who likely see nothing of the payment, while facing greater challenges provide for household food security due to loss of farmland (Hinton, 2003).

Occupational and environmental impacts of ASM have obvious implications, a situation made worse by optimal conditions for sanitation-related diseases and lack of health services. In addition to the excessive demands of day-to-day responsibilities, the unpredictable frequency and duration of ASM-related illness and injury poses a clear challenge for women who are commonly charged with tending to the sick. Serious injury or illness of a spouse may provide the impetus for women to enter into mining, many of whom face constraints to accessing most lucrative work. Specifically, the most lucrative, higher productivity activities in extraction or mineral processing are performed by teams wherein members have differentiated functions. Consistent, reliable participation is often an essential condition of membership (DRASPAC, 2015). This expectation undoubtedly extends to restaurants, shops and other businesses. The irregularity of women's availability due to illness of dependents and other shocks may make such an employee or crew member undesirable, likely with even greater challenges faced by women tending to small children throughout the workday.

In Tanzania, implications of women's work burdens were found to include reduced and inconsistent availability for commercial activities of their availability *as well as* inhibited socialization time, with consequence on their access to information, participation in organizations and benefits of social

Photos 26 and 27: Gender dimensions of environmental and occupational risks.
(Left) Discharge of tailings into a river causes siltation several kilometres downstream (*Photo: J. Hinton)*
(Right) In an attempt to reduce hygiene-related disease, underground miners use plastic water bottles to collect urine and, at the end of their shift, discard the bottles in a heap near the shaft entrances, creating a new issue (*Photo: J. Hinton)*

networking, among others (Hinton and Wagner, 2011). Girls charged with such responsibilities (including those pulled from school to care for young children) face the added disadvantage of disruption to their education and social participation, creating additional impediments on their future upward mobility. With exposure to socialization processes starting from girlhood, women's comparative lack of access to social assets can be a major impediment to their entrepreneurial development. As one Tanzanian researcher suggested "*to be a good, especially in the small scale mines sector, one has to be innovative, aggressive, daring and ready to accept challenges. The socialization process at both household and community levels puts women in a no enterprising position, where they are nurtured to be non-argumentative, non-aggressive and quick to accept defeat."* A degree of self-confidence in the social sphere built through experience seems to be a prerequisite to fight the prejudice, exploitation or discrimination by any actors in positions of relative power.

Given extensive domestic responsibilities, coupled with comparatively low incomes in ASM (often precluding hiring of caregivers or payment of school fees), many women in ASM sites work with their babies and small children at their sides. As soon as they are able, children readily pick up a hammer, carry increasingly heavy loads and begin panning alongside their mothers, thus marking their entry into ASM[44] (IPEC-ILO, 2004). Both boys and girls can be seen performing a wide range of functions: hauling bags of soil from pits and underground, carrying water, breaking rocks, panning, selling drinks and food among others (PFN, 2013; Henschel et al, 2001; Hinton, 2005). Despite this, many examples exist where boys and girls attend school *because* of their parents' direct and indirect work in ASM (Hinton and Mbabazi, 2011; Cuvelier et al, 2014; Hayes and Perks, 2012). However, child labour still provide a coping strategy for poorest families in particular, a situation made worse in the event of incapacitation of a family member, drop in mineral prices or other shocks. This often prompts the removal of, first, girls from school, and then boys. Children in ASM are highly susceptible to increased occupational risks (described in Section 3.1.1), and, when employed separately from their parents, they face additional risks of intimidation and violence (Jennings, 1999)[45].

Women's low socio-economic status and socio-cultural expectations may be linked to many children's initial exposure to and entry into mining. However, it is crucial to note that far too much research, policy and practice equates the needs, priorities and capabilities of women with those of

[44] Once in the sector, many young men and women continue to work in ASM due to family expectations of self-sufficiency, enjoyment of the freedom afforded by cash in hand and beliefs about limited benefits of formal education, especially in areas where other equally lucrative jobs are scarce (ILO-IPEC, 2004).

[45] In Kolwezi, DRC, although children were likely introduced to ASM while working alongside their mothers, 76% were working independently or with teams (Pact, 2007 cited in Hayes and Perks, 2012).

children. This practice supports justifications for protectionist legislation that often contradicts the interests of women (and provides the basis for exclusion from certain or any work at the mines) and further affirms notions that women's essential value and purpose is for procreation and childcare, rather than as individuals in their own right.

3.2.2 *Norms, Beliefs and Values*

More lucrative jobs in extraction are often perceived as "masculine" roles requiring strength that women simply do not possess, as exemplified by statements such as "*heavy objects are sometimes better lifted by men*" (Hinton, 2011: 47). The surveys conducted in the Kivus, only 1 in 5 men and *less than* 1 in 5 women believed that women had the right to work in extraction, suggesting both held perceptions of capacity to do physically demanding work (particularly as many believed women could work in trading) and lack of awareness of mining laws (Perks et al, 2015).

Despite these contentions, women have been found at 3T mines in Rwanda working underground to depths of ca. 150m hoisting ore and waste rock, in Gifurwe, using jackhammers with jacklegs, as well as in gold sites across the GLR. Strangely, restrictive beliefs concerning women's lack of capacity seem to have extended at a number of 3T sites in the GLR to the operation of sluices – also one of the highest paying jobs at the mine. Ironically, use of sluices by women is widespread in many mining areas and it is far less physically demanding than many other jobs in the mines, suggesting that such beliefs may be perpetuated (consciously or otherwise) to limit women's access to this higher paying work.

Many cultural taboos also influence women's exclusion from work in mines, and in extraction in particular. For example: In N'tulo, Mozambique, women are restricted from mining as they are believed to attract bad spirits; in Zambia, women are believed to cause the spirits of the gemstones to drive the stones deeper into the earth or disappear completely, a situation exacerbated during menses; in Suriname, women are prohibited from doing *any* activities in ASM (even cooking) when they are menstruating; in Orientale, women's presence in the mine makes

Photos 28, 29 and 30: Children and their Families
(Top left) A woman looks after her two small children as she breaks rock in a quarry.
(Top right) This young boy works alongside other family members in an impoverished region of northern Uganda.
(Left) A young girl in DRC learns early that women and girls are responsible for hauling heavy loads to market.
(Photos: J. Hinton)

minerals "disappear"; if a woman whistles near a mining area then an accident will occur, and many more (Dreschler, 2001; Hayes and Perks, 2012; Heemskerk, 2000; Synergy Africa, 2001).

Some men seem to believe that women are more likely to engage in sex with co-workers in this male dominated environment (Section 3.1.3). As stated by a woman tin miner *"It is also not easy to convince your husband that you want to join a group of about six men when you are one woman. Most men don't believe a woman can work with men and they do not engage in any sexual relations"* (DRASPAC, 2015).

Sex is, however, used as a coping strategy for a number of women, (Section 3.1.4). In one Ugandan tin mine, incidences of women trading sexual favours to receive help from men breaking especially hard rock have been cited (Hinton and Mbabazi, 2009), and cases of women petty traders trading sex for mineralized sand have been described. In the Kivus, Perks et al (2015) found that 13.7% of women at some point had trade of sex for access to work in mine sites, restaurants and other jobs. Notably, Perks et al (2015) found that single and married women were actually *less* likely to engage in sex work than widowed or divorced women.

Women working in mines in Rwanda seemed to take greater efforts to convince family and community members that their jobs were not linked to the sex trade, in one case a woman explaining her temporary ban from a local church. Prejudicial beliefs concerning a woman's proclivity to engage in sex at the mines serve to augment the numerous barriers women face in accessing certain jobs, compounding their vulnerability and perhaps therefore increasing their need to resort to sex work as a coping strategy.

Photos 31 and 32: Women working underground. *(Top)* Members of a local women miners association (top left) visit a woman tanzanite miner and concession holder (top right) and a few of her employees. *(Bottom)* This woman leads this underground crew comprised of her husband and sons at a cassiterite mine in southwestern Uganda. (*Photos: J. Hinton*)

Such beliefs, norms and values seem to be operationalized at all levels – from miners at the site and supervisors to CSO representatives and tradition leaders to mining authorities and policy makers. At the mine site level, examples include sluicing teams or processing plant managers openly stating that women are excluded from certain jobs as found at sites in DRC and Rwanda, respectively, to team members imposing a higher cost of entry for women seeking to join. During a mine site visit in South Kivu, one SAESSCAM officer in South Kivu suggested that women's participation in sluicing would physical impair their sexual performance but their bodies were used to the arduous, low-paying job of hauling ore. As described in Section 3.1.3, many men holding a wide range of positions of authority seem to contend that women are best placed in the household under the financial care of their husbands.

Photo 33: Physically arduous work? Women are believed to be unsuited to perform this job in a semi-mechanized processing plant. The task involves slowly pouring wolfram concentrate and water on to a mat. (*Photo: J. Hinton)*

At policy level, provincial and territorial by-laws in DRC that prohibit all pregnant women from working in mines (irrespective of their role) emerged in response to beliefs about what would protect women from increased vulnerability (Bashwira et al, 2013). As described in Section 3.1.4, in both Rwanda and DRC, resulting bans have had dire implications on the health and wellbeing of pregnant women and their families. Prominent gender and mining scholar Kuntala Lahiri-Dutt stated "*popul(ar)ist and universalist conceptions of femininity and womanhood tend to normalize contested gender roles through protective legislation that operates against women's interests*" (Lahiri-Dutt, 2013: 224 cited in Bashwira et al, 2013).

Although harmful gender beliefs of authorities are operationalized in many ways, perceptions that view women favourably are less commonly operationalized. For example, cooperative and company management at many 3T sites have expressed that men frequently abscond from work once paid while women tend to be more reliable (and in some cases have higher documented productivity), yet strategies to mobilize and retain women workers are few and far between[46]. Similarly, women are often perceived to be better money managers and more likely to spend earnings on family wellbeing, as one manager observed "*We as men like beer ... Women are economists."*, yet such statements are countered by fears that a woman will leave her husband if she earns too much money.

Such stereotypes are widespread yet harmful in that they reinforce constraints to women's agency, provide limits to expectations and acceptable behaviours of men and discount individual aspirations. In any event, unlike other beliefs, these "positive" stereotypes about women provide a business case for promotion of women in the sector (a common exception being incidences of women being trusted with loans from money lenders or advances from negociants), yet seem to nevertheless be insufficient to challenge those norms that keep most women on the low end of the hierarchy.

Education on the impacts of harmful beliefs and taboos (and their frequent contradictions with basic human rights) is needed, but beliefs may be best challenged through dissemination of examples where these beliefs have been challenged. Women have been observed working in digging crews in southwest Uganda and Rwanda presumably without catastrophic accidents or evaporation of minerals into thin air and additionally carry out labour intensive work in numerous roles (DRASPAC, 2015; Perks et al, 2015). A growing number of women have achieved success as pit owners, cooperative leaders, prominent traders and small enterprise owners. As one woman miner in Tanzania voiced "*I am now a woman miner in a class of my own comparable to the male miners, some of whom look at me with disapproval, because I have been able to match up to them, but I will push on*." (AMDC, 2015: 7). Some may face new challenges from beliefs creating a "stigma of success", prompting efforts to undermine a woman's achievements, even by other women. Overwhelmingly, women cooperative leaders and negociants in South Kivu affirmed that their success was therefore underplayed, as eloquently stated by one woman trader "*strategically, I try to be humble about my success."*

[46] During research in six 3T mines in Rwanda and North and South Kivu, DRC, managers in most mines cited concerns with diminished production due to loss of workers with low metal prices.

In any event, whether women improve their social status through increased incomes as a miner or gain prominent positions as local business owners, these women pioneers are increasingly viewed as being critical to challenging restrictive beliefs and norms at community and national levels.

3.2.3 *Access to and Control over Resources*

Gender inequalities are reinforced or challenged by the ways in which legal, social and cultural rights, norms and practices differently affect the capacity of women, girls, men and boys to use *and* benefit from a resource. An individual becomes more or less advantaged by their freedom and ability (or lack thereof) to trade-up or utilize assets to accumulate wealth (e.g. by converting minerals into money), to improve socio-economic and health status (e.g. by accessing education and health centres) and to mitigate shocks and stresses (e.g. by selling land, obtaining social support from friends). Those in positions of relative privilege are better equipped to draw upon a broad range of resources - from minerals, water and land to government services, roads and radios to labour, skills and social networks to money and savings – in order to further leverage their status, strengthen their influence and respond to hardships.

Differentials in access and control of many critical resources – such as education, health care and social networks – are examined throughout this report. This section highlights some of the core resources in the context of ASM that directly impact women's economic empowerment, bargaining power and relative status: (i) money; (ii) mineral rights; (iii) lucrative work; (iv) skills, tools and equipment; and (v) justice systems.

(i) Money

When ASM is undertaken within a family unit, women's work is quite often unpaid and conducted to supplement their husband's earnings (Amutabi and Lutta-Mukhebi 2001; Labonne 1998; Matthysen, 2014). Even when women are paid for their labour, they are often constrained to lowest paid positions and, in any event, often have marginal influence on decisions concerning its use, particularly in the case of married women (Section 3.1.3).

Women who are single, divorced or widowed *may* have greater control over use of proceeds from their efforts within the household (Section 3.1.3), yet they and married women face impediments beyond the domestic sphere, mainly as a result of limited bargaining power and little influence over "rules of the game" at the mine. For example, in Siguiri, Guinea, women panners receive profits from only one of every five calabashes washed with the remaining four going to the buyer (USAID 2000). In Orientale's diamond mines, women can only retain lowest value stones and are required to turn over high value stones to mine owners (Hayes and Perks, 2012). In one formal mine in Tarkwa, Ghana, women involved in transport, pounding and panning earn 60% less than men in digging (Akabzaa and Darimani 2001). In Gifurwe Mine, Rwanda, some women reported paying higher costs than men to "buy-in" to a team due to beliefs about their lesser contributions to production. Abuse of relative power by miners, mine owners and others result in many other injustices (cheating, scams, non-repayment of debt) that further impede women's ability to benefit from the fruits of their labour (Cote, 2014).

Access to capital for equipment or to start a business is a frequently cited constraint in ASM areas, despite the fact that some women may benefit from positive discrimination suggesting they are more trustworthy and better money managers than men (described in Section 3.2.2). Even where banks and micro-finance institutions exist in ASM areas, the sector is considered to be high risk. In any event, women can face multiple challenges accessing them (agency, numeracy, literacy, etc), they may need bank approval from her husband or male family member and often require collateral, especially land. Main reasons why women's control and ownership of land is so limited in the GLR were found to include: biased legal or customary inheritance rights of women (or failure to observe fair ones); difficulty in purchasing land without permissions from husbands or a proxy (e.g. shemeji, a male relative); insufficient capital or freedom to use it; and lack of influence on decisions concerning land (Perks, 2008; Perks et al, 2015; Hinton, 2011).

In order to help bridge some of these gaps, gender-responsive small grants programs are now being set-up in selected Tanzanian banks and the Nigerian Government has committed to setting

Photo 34: Negotiated Fees for Services
These women in South Kivu, DRC report that they can earn up to ca. $2 per day by providing panning services to tin miners. (*Photo: J. Hinton)*

up mining desks targeting ASM cooperatives. Loans from sponsors, financiers and mineral dealers likely require experience, savvy and confidence that vulnerable persons in particular may lack and women may face specific beliefs about their capacity.

Greater success has been yielded by local savings schemes via women's groups, such as the Association of Free Women in Nyabibwe, an informal collective of sex workers whose membership fees are pooled to pay health bills, get them out of jail or respond to other urgent needs (Perks et al, 2015).

Many women participate in village and savings and loans associations (VSLA) formed in groups according to job at the mine (e.g. Katugota in South Kivu) or within the broader community (e.g. at H&B, Habatu and Gifurwe Mines in Rwanda), where women typically participate actively in regular meetings and yield economic benefits in the form of small loans. Such groups can provide a platform to increase women's capacity to voice concerns to management and ideally lobby for necessary changes. Where women are engaged in other economic activities (e.g. shops, restaurants, small vendors) directly benefiting from miners' incomes, they could similarly be organized in associations with the intent of increasing their engagement with mine management. Projects such as Pact's WORTH program to build literacy and financial skills, currently being supported by DMFA, will provide an invaluable model through which the diverse benefits of women's organization can be realized.

(ii) Mineral Rights

Control of the mine site and its proceeds is largely in the hands of owners of the mining area or pits and shafts therein, either by legal status, by force (e.g. by armed groups) or by informally conferred rights (e.g. by land owners, traditional authorities).

Access to legal rights (claims, concessions) are determined by legislation that often contrasts with the reality of ASM and confers requirements that can provide insurmountable hurdles for vulnerable persons, in particular, to overcome in the absence of outside support or intervention. While literacy poses obvious constraints for many, a woman's lack of agency and structural constraints (e.g. norms, values, low social status) can affect her capacity to travel to often distal government offices and engage with largely male officers, she may be impeded by her inability to save and use money needed to pay requisite fees and, particularly if inexperienced in dealing with authorities, she may lack the confidence and savvy needed to negotiate corruption by licence issuing authorities. Indeed, many instances exist wherein an artisanal miner seeking government support was stifled by licensing officers conspiring with more affluent players to acquire mineral rights (as cooperatives or companies in accordance with prevailing legislation) on the very area the miner brought to their attention. Similar constraints likely also apply when rights are conferred by local tribal chief ("Mwami", who in some cases are women) or landowner while armed groups may be even more daunting (Cote, 2014; Perks et al, 2015).

Few women hold mineral rights or own mines, pits or shafts in the GLR. Most exceptions seem to be women who are relatively advantaged – economically, by familial or social ties or by education – or women who are used as proxies for husbands or relatives[47]. Conversely, some women also use proxies to obtain mineral rights. One women miner in Tanzania, who enlisted two men after

[47] Growing attention on military involvement in mining in DRC have reportedly prompted some FARDC soldiers to engage their wives as proxies in order to take control of their ASM businesses with oversight often done by other trusted intermediaries (Cuvelier et al, 2014).

encountering difficulties in government offices, stated "*Some people in positions of power create too many obstacles for women to own mining claims, making them wait in hope or simply not giving them priority or information on time when such opportunities arise*," a position validated when none of the 25 plots identified for ASM in the area had been allocated to a female miner (AMDC, 2015). The extent to which such a scenario impedes women's decision-making power is uncertain.

Land resources can also play a significant role in mineral rights. In Rwanda, for example, Carstens (2010) observed that few women held mining claims, but one was able to obtain mineral rights as she owned the land on which the mine was located. A 41-year old, seasoned woman miner in Ghana also was able to obtain mineral rights after seizing the land of a concession holder who cheated her, enabling her to obtain her own licence and start a mine (AMDC, 2015). As described later in this section, avenues of recourse for injustice are clearly critical to women's acquisition of resources, including minerals and land.

Even once mineral rights are conferred, women may face additional challenges related to their low position in society. As voiced by a successful gold miner, a widow, in Ghana: "*Firstly, you cannot directly monitor the production in the pits because you cannot go down the deep shafts in long base mining…. once I was informed of a big swindle by the mineworkers which I confirmed after seeing them with new motorcycles. I was told they struck a good amount of gold in my pit. When I confronted them they abused me verbally*" (AMDC, 2015:6). Such difficulties have led many women mine owners to enlist men to manage operations, as found in Orientale and South Kivu in DRC, Uganda, Tanzania and elsewhere (AMDC, 2015; Cote, 2014; Auranda Minerals, 2015; Hinton and Wagner, 2011), sometimes increasing the risk of being swindled further (AMDC, 2015).

Despite this, access to minerals and mineral rights can provide a launch pad for accumulation of other resources and challenging of mindsets. These linkages are exemplified by the story of one tanzanite miner, "Pili" who donned men's clothes and pretended to be a man for almost 5 years in order to work in the mines (Hinton and Wagner, 2011). Over a decade later, she is now a successful claim holder, with semi-mechanized operation, and has diversified into farming, rental houses in nearby cities and owns her own home (ibid).

Photo 35: Joining a Team. Team members often have a say in approving new members and require some form of payment to join. (*Photo: J. Hinton)*

(iii) Lucrative Work

A number of examples (in addition to that of Pili, above) exist of women using their existing (often limited) resources to improve their position, yet most women do not succeed in accessing the most lucrative jobs in mines. In terms of jobs in mineral production, some initially believe that if you have the tools and physical strength, you can simply go to the mining area and start digging. While this may be true when it comes to small, near surface excavations dug in soft material, most 3Ts rock deposits typically require – at a minimum – work in a team comprised of at least 3 members and often with approvals of some sort of authority. Similarly, more productive profitable work in processing (e.g. using sluice boxes) also requires work in teams (Section 3.1.1).

Women can face additional challenges joining a gang beyond those provided by discriminatory beliefs and disparate work burdens (Section 3.1.2 and 3.1.3). In Kalehe, Mwenga and Walungu in eastern DRC, one reason why women could not obtain (or didn't seek) jobs in high paying extraction teams because of the costs of joining (e.g. goat, crate of beer, money) (Perks et al,

2015), a situation undoubtedly exacerbated by women's lack of access and control of money. Trade of sexual favours may be a strategy used to obtain such work (Section 3.2.2).

In addition to this, other approvals may be required (e.g. from a team leader, mine boss or other authority) and team (or sites) often have their own rules. In an informal Ugandan tin mining area, miners indicated that anyone is free to form a gang, but these are typically based on social ties (friendships) and shared background, language and mutual trust (DRASPAC, 2015). One strategy used by vulnerable young men in DRC was to take on menial, low paying transporting or labourer jobs supporting gangs with the intent to develop relationships needed to later join (Perks et al, 2015).

Photo 36: Building sluicing skills. Women gold miners are trained to use locally fabricated sluice boxes costing ca. $40. (*Photo: J. Hinton)*

As pointed out in Section 3.2.1, women and girls often have much lesser time, confidence and freedom to develop necessary social networks. In addition, rules also call for daily punctuality and prior approvals from team leaders for absenteeism, the latter two of which may be a challenge given women's work burdens or need for permissions from their spouses (DRASPAC, 2015).

(iv) Skills, Tools and Equipment

Many long-time miners and traders have honed a range of skills needed to make decisions for productive operations. New entrants – particularly those working in isolation from those more experienced – lose money, time and sometimes their lives due to lack of skills needed to identify minerals, work in teams (e.g. operate a sluice box) and deal with stability issues (e.g. timbering) as needed to prevent tunnel collapses, among others.

An all-woman crew in one Ugandan tin mine credits their leader, who shared her skills from working in another gang, teaching them to sample first to decide on the best place to dig, how to open tunnels, panning and their entire system of production (DRASPAC, 2015). Women report that as a group, they can get much more (up to 10 kg per day), enabling different members to buy plots of land, repay loans, pay schools, buy livestock and day-to-day goods (ibid). At Gifurwe Mine in Rwanda, mine management has invested in induction and regular training of both women and men, and women (albeit in lower numbers) perform almost all roles at the mine, including using jackhammers with (weight-bearing) jacklegs to break rock underground and supervising underground timbering teams and drilling and blasting crews.

When women have avenues to access, use and benefit from necessary skills, they undoubtedly have greater opportunities for upward mobility. However, social support and role models can provide additional reinforcement through sharing of experience and links to authority figures. AMDC (2015) describe the experiences of a woman miner in Tanzania, whose aunties were miners and introduced her to dealers from the DRC. She travelled to the DRC and found many women trading not just one but many minerals, including silicon and titanium. Upon her return home, she realized that titanium was being dumped with mine waste and she begin mining it. Two years later, she had the resources to get a mining licence and is now the only titanium miner in the country. The many women miners in Rwanda and DRC who recently expressed that they were incapable of using sluice boxes would undoubtedly benefit from skills of women adeptly using them at neighbouring sites.

Mineworkers, men and women, all around the world most commonly cite their biggest need is tools and equipment (which is often a requirement also to join a team or gang) (Perks et al, 2015; Cook and Mitchell, 2014). Women miners in a Ugandan tin mine say that access to explosives and

blasting would increase their production substantially, but lack the know-how to obtain and use them and, given their illegality in the absence of certified blasters, would subject them to police harassment (DRASPAC, 2015). In an attempt to help women in processing, a female supervisor of a small company tried to establish an all-woman crew in a gold rush in central Uganda – equipment (e.g. heavy jackhammers) was deemed to be unsuitable and cited as the main reason that the group failed to do the work. An underground operations manager at Gifurwe Mine affirmed that, with the use of a weight-bearing jackleg, women need only the technical skill to use jackhammers. A range of tools and equipment needed to perform tasks in ASM was presented in Section 3.1.1 and challenges concerning access to capital were discussed above, while appropriate technology in light of specific issues women may face is also a major gap.

(v) Justice Systems

A justice system is not a resource, *per se*, but is comprised of structures and processes that require multiple resources to successfully navigate. In the GLR, justice is meted out via government (mines departments, police, courts), traditional authorities (chiefs, elders), armed groups in DRC and mine security forces (guards, military), informal authorities (mine owners or bosses, hill leaders), or by combinations therein. Notably, armed groups and government, respectively, have reportedly diminished the influence of traditional authorities in parts of eastern DRC experiencing conflict and regions where formal systems are decentralized (e.g. Burundi, Rwanda, Uganda). New systems of authority that develop in mining areas (mining companies, prominent business interests, hierarchies emerging at mine sites) can also supersede government and traditional authorities (Hayes and Perks, 2012; Perks et al, 2015; Matthysen, 2014).

This section does not detail all forms of injustice in ASM, but highlights its most prolific form in the GLR, SGBV. The trauma, stigma, impacts on families and livelihoods that results from SGBV are compounded by its capacity to reinforce power structures and thereby entrench gender inequalities even further. In addition to rape, physical assault, confinement, neglect and early marriage, other forms of SGBV – including sexual harassment, intimidation, humiliation, discrimination or denial of opportunities and exploitation – also serve to violate women's and girl's capacity and undermine their ability to challenge power structures (Section 3.1.4).

Common responses when women seek to directly address perpetrators of SGBV have been highlighted throughout this report. Examples include sex workers being threatened with beatings or death threats when payment for services are demanded, verbal abuse and threats of beatings of women miners by men miners and mine authorities (particularly following arbitrary and variable application of the pregnant woman ban), to women being beaten for arguing with their husbands. If a case is presented to authorities, many reportedly only assist in exchange for money, posing an obvious constraint for those most vulnerable victims (Perks et al, 2015). Côté (2014) concludes that the prevailing response to SGBV in these areas is "general indifference", as affirmed by relative impunity given to perpetrators of SGBV, failure to obtain reparations for victims of SGBV, systematic exclusion of women from political processes, systematic failure to observe inheritance rights and avail women their right to land, among many others. If a case is brought forward, compensation is negotiated between perpetrators and the victim's family and often confer meagre payment (e.g. a goat) with the victim receiving neither compensation or justice (Cote, 2014).

Many are resigned to the lack of justice and can be subjected to greater risk by attempts to seek recourse. Perks et al (2105) observed that "*demands for justice after suffering human-rights violations are at best unrealistic and, at worst, dangerous…..*(when) *those within the justice system were often the most likely to leverage their power to abuse communities*." This situation is compounded when authorities in charge are the perpetrators of SGBV, for instance, as when traditional chiefs requisition sex from women and girls (Cote, 2014) or mine bosses demand sex for jobs (Perks et al, 2015). When complaints *are* lodged about exploitation, abuse or other mistreatment, when perpetrators are actually those in various positions of authority around mines can be well positioned to block access work. Perpetrators *may* be punished in situations where formal or informal justice systems are used to generate revenues for those in the system (e.g. cases where SGBV is used to gain access to property of perpetrators), which undoubtedly creates an additional complexity to the gender dimensions of recourse (D. Buss, pers. comm).

It is important to recognize that not all authorities in the hierarchy are exploiters of the weak and perpetrators of SGBV. In fact, some holding various positions of authority are important allies. Examples range from small scale miners who worked their way up from the lowest rungs on the ladder and deeply understand the realities on the ground to government officers who aid women in applying for licences to a respected supervisor ("hill boss") of a tin mining area who help women and men alike deal with incidences of conflict, theft and violence to one small scale lead gold miner who has fired workers in response to complaints from village leaders that he was "poaching men's wives" and had another worker arrested and jailed after he raped a girl in the community (AMDC, 2015; DRASPAC, 2015). In Rwanda, a number of 3T mining companies who relied on ASM labour were, in 2010, willing to adopt gender policies and support formation of committees of woman miners to provide a channel for communication of their concerns (Carstens, 2010) and sites, such as Gifurwe Mine, provide important models for others to follow.

3.2.4 *Participation in Decision Making through Collective Action*

Collective action has become a mainstay of efforts to formalize mineral production and trading chains. Forming organizations (associations, cooperatives, informal groups) can be an effective way for women, girls, men and boys in ASM communities to meet shared needs, amplify benefits from the different resources of group members and "lighten the load" of responsibilities. It can also provide a vehicle through which to channel concerns to those in power, advocate for change, demand rights, access savings and loans, receive external support and funnel revenue collection.

An excellent example of this is the *shashulere* women, who act as buying agents for dealers in Nyabibwe, DRC. After creating the *Association de Mamans Chercheures de la Vie* (Association of Mothers Looking for Life), the AMCV registered provincially, lobbied the Governor and made in-roads with influential persons at different levels (Bashwira et al, 2015). Recognizing that costs of a mineral buyer permit (carte de négociant) precluded their legality, they petitioned the Division of Mines to instead obtain 1 artisanal mining permit for groups of 3 traders (ibid), although the status of these efforts is currently unknown. Also in Nyabibwe, a women trader's association (AMOPEMIKAN) was formed in 2011 to lobby for women's access to mining areas and is now taking steps to become a cooperative. They want to acquire its their area for mining but local authorities have only identified a ZEA in a distant conflict area. These examples illustrate both the prospective power of women's organizations and shortcomings of legislation that does not account for realities on the ground[48].

Increasingly, GLR governments are mandating formation of cooperatives as the only means to obtain legal permissions to mine via ASM. Uganda is the only exception wherein small companies, individuals and community-based organizations (CBOs, registered at subcounty level) are also allowed. Cooperative registration costs and procedures in Rwanda and Burundi have been found to be excessively demanding for most artisanal miners to fulfil (Cook and Mitchell, 2014; Matthysen, 2014). In DRC, cooperatives are legally the only entities, which can apply for a ZEA. In all countries, "elite capture" has precluded realization of intended benefits and actually can create new lines of power and authority within the hierarchy (Matthysen et al, 2014; Hinton and Mbabazi, 2011; Rutherford et al, ms; Perks et al, 2015). In Nyabibwe, DRC, one woman negociant stated that women were more active in mining until cooperatives were formed by men and women were "*left out* (because) *men don't want women involved… and want* (women) *excluded from the entire mining area.*" Since opposition of this by a local women's association, AMOPEMIKAN, women are now allowed to do *"small things"* (i.e. buying tailings and selling concentrate) but are still excluded from other work.

Associations, including women's associations can suffer the same outcome. "*…we would like to see an organized structure to defend women's rights here in our community. Some of these structures exist but they are very discriminatory, because one cannot help you if you have no money or if you don't have influence in the organization."* (Perks et al, 2015: 27). For those that join, many miners have reported few benefits and excessive demands from their requisite membership, including

[48] Examples of different licencing systems used in different jurisdictions for agents, traders and exporters are found in Hinton and Levin, 2010.

Photo 37: Organization of women provides an important platform for change.
Women in Katogota in South Kivu, DRC work under a woman-led cooperative and have formed VSLAs in groups according to their occupations (mineral traders, crushers, panners, transporters and restaurant/small business owners (*Photo: M. Mukwaka).*

newly formalized lines of authority to collect and distribute revenues (Matthysen, 2014). Over the past two decades of formalization efforts around the world, such legal requirements have simply prompted mine owners, pit bosses and other leaders to reconstitute themselves in whatever form the law prescribes or enabled elites previously outside the system, particularly those able to swiftly and shrewdly navigate government systems, to seize informal areas from unsuspecting artisanal miners (Hinton, 2005; Rutherford et al, ms). As voiced by a senior government mines officer in the DRC "*The big problem now* (is that) *three or four people with money form a cooperative, they* (mineworkers) *are members but they are held hostage."*

Under the recently instituted OHADA, signatory francophone African countries will invariably need to make reforms given definition of "cooperatives" as "companies". This bodes well with the principle that the more rights (e.g. rights of ownership of a quasi-common resource) comes more responsibilities (e.g. in terms of decent working conditions and other labour rights of "employees"). However, whether this will provide an entry point for miner-owned and operated associations to control artisanal mining rights or whether it will simply affirm non-miner ownership of ASM areas remains to be seen. In any event, the specific terms of OHADA require scrutiny to determine implications for artisanal miners, their rights and gender dimensions therein.

Risks of further strengthening the power of often previously informal lines of authority may serve to exacerbate power imbalances and entrench gender inequalities even further. Main mechanisms for this may include increased power of cooperative authorities to allocate jobs, distribute payments, collect mandatory membership fees, and perhaps to exploit, discriminate or perpetrate other forms of SGBV with even greater impunity. In countries where formalization campaigns have yielded the most traction, Rwanda and more recently Burundi, participation of women seems to be lower than in informal ASM, included in which is seasonal ASM to which cooperatives seem unlikely to apply. In Burundi, where binding ties between traders and cooperative have been entrenched in law, Matthysen (2014) observed that the number of women diggers had, in particular, decreased over the prior two years (even alongside overall declines in the workforce). While influence of traders on these organizations may be a factor, increased mechanization is underway at a number

of sites in the GLR. Introduction of crushing and grinding machines, sluices boxes and jigs, which primarily benefit the men who control and operate them, can render women's tradition roles in mines obsolete, as was found in Burkina Faso (Jacques et al, 2002). For example, large capacity shaking tables, particularly where used to reprocess tailings from sluices, would render women's jobs in panning or petty trading in tailings obsolete.

Vulnerable groups in ASM communities, and women and girls in particular, could yield tremendous benefits from inclusive, gender responsive associations and cooperatives, particularly if they serve to capture their voice and strengthen their bargaining power. Women's focal points appointed to liaise with women miners (e.g. in Rubaya, DRC) and support for women's groups and communication channels within the mining workforce (e.g. in Gifurwe, Rwanda) are a start while projects that building upon pre-existing organizations (e.g. VLSAs) and expressed priorities of women can add considerable value. In DRC, iTSCi has established 4 provincial mining committees (who report to the National Minister of Mines' Groupe Thematique in Kinshasa) and 15 local mining committees (CPS), comprised of local government leaders, security personnel, CSOs/NGOs, and SAESSCAM, who hold regular meetings with local sector stakeholders and monitor compliance with OECD DDG. Such multi-stakeholder meetings could provide an important opportunity for women's groups to vet their concerns – including those related to discrimination, exploitation or other forms of SGBV in mining areas – and provide important links to support organizations.

In any event, reform processes in each of DRC, Rwanda, Burundi and Uganda can either serve to perpetuate or even worsen vulnerabilities in ASM communities through regulation or counter it by defining and overseeing regulations and procedures that demand inclusivity, gender responsiveness, fairness and accountability of whatever organizations are prescribed.

4. Conclusions

Formalization of ASM and its trading chains represents a critical opportunity to transform the sector into an engine for local and national development and important contributor to peace in the GLR. Realizing this potential shall be largely determined by the extent to which the gender dimensions of ASM are recognized, valued and incorporated in policy, projects and programs concerning minerals, peace building and development in the GLR.

4.1 Production, Reproduction and Challenges to Gender Relations in ASM

4.1.1 *Complex Interplay between the Four Dimensions of Gender Relations*

This desk study examines four dimensions of gender relations and how they interplay, namely: (i) gender division of labour, (ii) access to and control over resources, (iii) decision-making power, and norms and values. It shows how disparate gender relations within ASM sites and communities are legitimized and entrenched by social structures, norms, beliefs and practices and both result in, and are reinforced by, the varying abilities of women, girls and men and boys to participate in decision making, to exercise agency and to undertake and benefit from different roles and resources. This is reflected by the following:

1. Driven to ASM mainly by economic vulnerability or drawn by economic opportunity, the majority of ASM communities are comprised of vulnerable and disadvantaged groups, including the elderly, youth, sometimes landless, migrants and disenfranchised, within which women and girls face additional disadvantages owing to unequal gender relations.

2. Discriminatory beliefs, impediments to agency and bargaining power, the undue and sometimes unpredictable burden of women's and girl's work, and lack of access and control of key assets and benefits derived from them are mutually reinforcing factors. Specifically, these elements jointly: restrict women's and girl's access to skills, education and training; impede their freedom to participate and influence decisions that concern them; relegate the majority to lowest-paying and lowest-ranking jobs in mining and non-mining related systems of production and trade thereby rendering their work invisible; and ultimately increase their vulnerability to insecurity, ill health, SGBV and other dimensions of poverty. Protective legislation that purports to serve but has effectively undermined women's interests through its application exacerbate these vulnerabilities.

3. SGBV is also used as an instrument to operationalize and reinforce harmful gender norms, beliefs, and values by reinforcing who is in control and who has the power. SGBV ranges from grievous incidents intended to terrorize, as found in areas under rebel control in DRC, to insidious and subtler cases of discrimination, exploitation or intimidation in secure regions of the GLR (e.g. in Rwanda, Uganda and conflict-free zones in DRC). Even women in relatively elevated positions (e.g. mine owners) have been subjected to SGBV (e.g. threats, harassment) as they seek recourse for thefts or other infractions. Those in positions of greater authority have excessive impunity in most ASM environments, while domestic violence often goes unreported, in both cases with attempts at recourse often serving to increase women's and girls' vulnerability even further.

4. The majority of women and men mineworkers in 3T mining areas held by cooperatives are *de facto* members (whether registered or otherwise) and are largely voiceless within the organization. Cooperatives largely operate as companies but without corresponding commitments to formal systems (e.g. policies, codes of conduct, communication systems, etc) that would – for both cooperatives and companies – provide entry points to redress many gender issues identified herein.

5. Men dominate positions of authority within the social hierarchies that form around and influence mine sites, although a minority of advantaged women hold prominent roles also. Positions of authority include household heads, leaders of mining teams, mine bosses, mine or pit owners, local mineral dealers, traditional authorities, armed groups and security forces, local and central government officials, military, prominent business

owners, mineral traders and exporters. Within their spheres of influence, authorities define the formal and informal rules of the game and thereby sustain and augment their power through allocation of resources (e.g. jobs, mining areas, loans) and distribution of benefits (e.g. according to social, ethnic and familial ties, patronage, personal greed, profitability, deductions of debts) (Rutherford et al, ms). The way resources and benefits are meted out is influenced by their own beliefs and perceptions concerning gender, rights and entitlements as well as prevailing laws, norms, beliefs and practices. Although many elements within the social hierarchy serve to reinforce gender inequalities, many in authority have proven to be important allies in advancing women's and girls' positions, including government officers supporting acquisition of licences, local leaders advocating for effective women's associations, mine owners seeking retribution for cases of SGBV and many others. However, even in these cases, women and girls face specific challenges in engaging authority figures as a means to improve their own status (ibid).

6. Aforementioned issues seem to jointly contribute to the widely observed trend wherein women (young, adult and elderly) participate in ASM in lower numbers as ASM becomes more mechanized, formally organized and legally operating (Eftimie et al, 2012, Hinton, 2003). This is largely because these efforts can entrench and bolster power of those in positions of authority by legitimizing their control even further. This situation can be further exacerbated when women's labour becomes rendered obsolete by equipment that *should* improve their incomes and reduce their work burdens, but often serves to benefit whoever is best positioned to take control of these assets and those he/she chooses to employ.

7. Participation in ASM and its economies has nevertheless provided many women with incomes and a sense of agency that may serve to challenge the prevailing gender relations that reinforce men's dominance. A growing number of examples demonstrate that women want training and financial support to increase benefits from mining, are organizing to demand their access to the mines and many are successfully changing mind sets of spouses, family and community members by improving their socio-economic status.

8. Legal and institutional measures to support formalization of ASM and its trading chains thereby run the risk of exacerbating rather than redressing gender equalities. This is mainly because mining and other laws often contradict the reality on the ground, are blind to the gender impacts created by them, preclude licensing of most vulnerable miners and traders by providing unachievable conditions and can fortify the relative power of elites and render women's work invisible or even obsolete by ignoring the implications of mechanization, organization and formalization. This situation can be made worse by laws that purport to protect women but actually serve to undermine their interests and the tendency to aggregate women's needs, priorities and interests with those of children, thereby further affirming harmful beliefs that women's essential value and purpose is for procreation and childcare, rather than as individuals in their own right.

9. Gender dimensions of systems of production and trade in economies *surrounding* ASM are not fully examined herein but interdependence with mineral production and trade is clear. This knowledge gap must be filled in order to ensure livelihoods outside of the "ASM system" also contribute to and benefit from efforts to increase ASM's development potential.

4.1.2 *Negotiating Gender Relations*

Even under the most adverse of conditions, women, girls and other vulnerable groups in ASM demonstrate remarkable resilience. This is demonstrated by a number of strategies employed, many of which challenge gender norms, while others pose the risk of worsening inequalities further. While examples continue to emerge, there is still limited understanding of the range of strategies available to and used by women and girls in the sector, including on the ways in which they navigate systems of authority within the social hierarchy (Rutherford et al, ms). A few examples of strategies highlighted in this report include:

- Seeking work in ASM and ASM communities (often requiring migration and the agency it requires), mainly in response to economic vulnerability created by different context specific factors that may include insecurity, displacement, inadequate or lack of livelihoods, abandonment or widowhood and other shocks and stresses.

- Employing strategies, such as trading sex for money, work or jobs and enlisting male proxies to fulfil normative requirements (e.g. to buy land, manage operations) or for security purposes. While these coping strategies mitigate vulnerabilities and inequalities in the short term, they may also increase risks of SGBV, HIV/AIDS and exploitation.

- Demonstrating agency, ingenuity and resilience by trading up resources. For instance using social resources (knowledge shared by a relative, seeking introduction to gatekeepers, learning practices of successful traders) to employ human resources (labour, good health) to trade minerals and acquire financial resources (money) needed to solicit support from government (navigating structures and processes) and obtain a mining claim.

- Forming women's associations and groups to lobby for access to mining areas, accumulate savings and disperse small loans (e.g. by VSLAs) and provide social support.

- Collaborating with other women to form a team, and sharing their skills, knowledge, labour and financial resources to increase their productivity and incomes. Increased incomes derived from working in groups and associations has enabled many women to increase their bargaining power in the household but notably can put some at risk of SGBV by challenging traditional gender roles therein.

4.2 Significance of Commodity, Community, Culture & Country

While gender dimensions of both 3Ts and gold are similar in terms of roles performed by women and girls and barriers to their upward mobility, women's and girls' participation in 3Ts is much lower than for gold in most areas of the region. Three interrelated factors may be at play.

- First, although the systems of mineral production for 3Ts and gold are essentially the same, requirements for trade, security and transport differ greatly. Compared to 3Ts, gold is bought and sold far more easily; is readily hidden from potential thieves, mine authorities and spouses; and is more easily recognized than 3T minerals.

- Second, women and girls more readily perform jobs in ASM that enable flexibility (given work burdens), have low entry costs (e.g. basin and shovel, no membership fees) and minimize the need to navigate multiple and sometimes oppressive lines of authority (Rutherford et al, ms). For both gold and 3Ts, these conditions are provided by alluvial (river associated) and highly weathered deposits and precluded by the comparatively greater investment, degree of organization and sometimes mechanization required of mining hard rock or moderately weathered deposits. The way in which gold and 3T mineralization occurs across the GLR (and is differently dispersed by weathering and alluvial processes) may – together with the comparative ease of recognition of gold – partially account for the disparity in women's participation.

- Third, because production volumes are typically so much higher in hard or slightly weathered rock 3T deposits, these sites (compared to alluvial deposits) *may* receive disproportionate attention from those involved in data collection. While this principle also holds true for gold, by comparison, production from large numbers of miners involved in production from highly weathered or alluvial deposits can cumulatively be massive across a relatively small area and therefore may receive greater scrutiny.

Country and context also lend insight into the significance of different factors on gender dimensions of ASM. In all cases, the division of labour and core factors affecting women's empowerment in ASM areas are quite similar. However, and although the histories, cultures and economies of DRC, Rwanda, Uganda and Burundi are clearly intertwined, some specific distinctions are evident.

- The successive wars and conflicts that have ravaged large tracts of certain provinces in eastern DRC have resulted in perpetuation of SGBV at astounding rates and traumatized those who fled or are still living in insecure conditions. Many women took on non-traditional roles as household heads (due to widowhood, abandonment, migration of men to mining or armed groups) that challenged traditional roles but increased susceptibility to violence. In all GLR countries, migrations by women to ASM areas and adoption of non-traditional commercial roles attests to great resilience and (often) agency. However, those suffering the psychosocial and physical impacts of insecurity and violence, women and girls in particular, likely experience additional constraints in challenging male dominance.

- Breakdown of decentralized state institutions across DRC under Mobutu's despotic regime has affected the extent to which traditional authorities continue to exert controls over mining areas and perpetuate cultural norms and practices therein. This influence may be greater in parts of DRC unaffected by conflict but has been undermined or compromised by armed groups in conflict zones and, in neighbouring Rwanda, Uganda and Burundi, by variably effective State presence at local levels. Although culture continues to positively and negatively influence norms, beliefs and practices in all cases, shifts in gender relations are occurring in areas where the rule of law (e.g concerning land inheritance) is followed.

- The degree to which States have domesticated and committed institutional resources to the ICGLR Regional Certification Mechanism and iTSCi, through which 3T certification is currently issued. Formalization varies according to these commitments, with most progress in Rwanda, portions of eastern DRC, and improvements in Burundi. Since mid-2015, in particular, Uganda has begun to make ASM a priority with plans to domesticate the RCM and related pilot projects in the pipeline. Women's direct participation in ASM seems lowest in Rwanda and eastern DRC where formalization is most evident and where efforts to mechanize are underway.

- In addition to the vast number of tribal groups in DRC, and similarities and differences between them, the viability of agriculture and other livelihoods in different 3T areas, as influenced by land pressures, population density, climate change, conflict, etc, have been shown to also affect women's and girls' participation in localized areas.

4.3 Contributions to Existing Literature and Gaps in the Discourse

This work contributes to the discourse by synthesizing and reframing the increasingly rich work on gender and ASM in the GLR to examine the multiple dimensions of gender relations in mining areas and surrounding communities. In doing so, it increases understanding of how multiple factors work together to reinforce gender relations and ways in which this tenacious interplay can be challenged. Remarkable examples are emerging whereby women with even the sparsest of resources within their control can accumulate and trade-up resources to challenge the status quo of male privilege and authority. Finally, this work argues that unless efforts to promote organization, formalization and mechanization sufficiently account for dynamics described herein, women and girls face even greater likelihood of exclusion, discrimination and injustice, particularly if most benefits accrue to males and their dominance is reinforced.

Numerous gaps in the discourse have been identified. Women's work in ASM is largely invisible due to various factors including: stereotypes of what constitutes a "miner" (i.e. often those in digging); the tendency of women to undertaken domestic roles alongside work in mining (e.g. taking ore home for crushing or spending fewer hours in mining areas) and lesser value afforded to women's roles (e.g. work limited to tailings or in rivers away from digging sites, low priority given to transporters). Women are still commonly (but not always) obscured by broad estimates of the ASM workforce that fail to quantitatively reflect the extent of participation in different roles. Alongside this, understanding the gender dimensions of ASM's contributions to local and national economies would also provide an invaluable tool to lobby for change at all levels. Furthermore, with a few exceptions, most gender work focuses on gold production. The reasons for women's lower participation in 3Ts, as well as differences in dynamics between the commodities, would help

confirm or refute some the assertions made herein, provide insights into the influence of traceability efforts and support identification of strategies ways to improve their gender-responsiveness. As well, the gender implications given the dynamic nature of many types of ASM (e.g shock-push, rush), effects of influential external forces (policy reforms, commodity price drops) and resulting in- or out-migration are not well understood.

Although some work is currently underway, rigorous research is needed to better understand how women and girls currently navigate power and authority structures and processes as a means to identify strategies to advance transformative change. This work should extend from ASM sites to surrounding economies. Finally, any future discourse should draw from recent work by Perks et al (2015), which, among its many contributions, clearly highlight the need to explore diverse ways that different vulnerable groups (elderly, disabled, migrants, etc) and women, girls, boys, and men within these groups face unique challenges. Understanding different positions and power of different women and girls within households will also provide valuable insights, including in contextualizing findings.

5. Recommendations

Drawing from findings and conclusions herein, the following recommendations on future research, policy and practice are put forward (Sections 5.2-5.4). These target key actors working in various facets of ASM and the mineral trade in the GLR, very few of which work extensively on issues related to gender and mining (Section 5.1).

5.1 Key Stakeholders and Potential Change Agents

Recommendations target main stakeholders groups, which have interest and influence on advancing gender equality in 3T mining in the GLR. Selected actors are categorized according to: private sector stakeholders and organizations; government; civil society and non-governmental organizations; regional and international bodies and other development partners; and academia.

The number of mining platforms is vast and growing, thus this section is far from comprehensive but provides a foundation on which to build a critical mass of gender champions in the GLR. A simplified representation of different stakeholders is presented in Figure 2 and discussed further below.

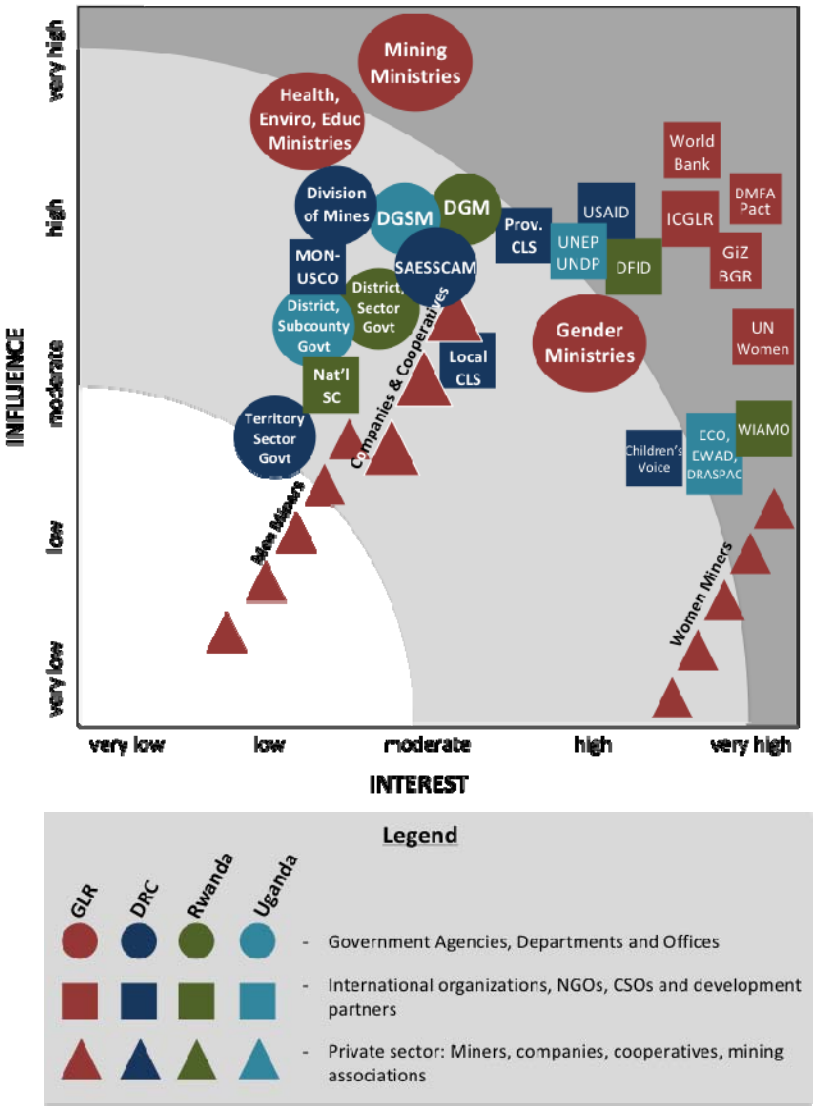

Figure 3: Interest and Influence in Advancing Gender Equality in 3TG Mining in the GLR

Private Sector Stakeholders and Organizations

- *Women Miners* have high levels of interest but generally low influence on women's empowerment and safer more secure livelihoods is extremely high for the most part, despite sometimes playing roles sustaining harmful beliefs, norms and practices.
- *Men Miners, Spouses of Women Miners and other Family Members* have variable and sometimes low levels of interest and, in some cases, may be detractors, particularly where traditional beliefs and customs (e.g. related to masculinity and male dominance) are challenged. Influence on the success of gender equality efforts at an individual, site and household level can be high but influence is limited with respect to widespread change.
- *Mining Companies and Cooperatives* have highly variable gender attitudes with beliefs and priorities of individuals in authority playing a key role. Government policy and law has a high influence while perceptions and norms could also be influenced via exposure to good practice examples.
- *Private Sector Associations*, such as the Rwanda Mining Association (RMA), Uganda Chamber of Mines and Petroleum (UCMP) and Federation of Enterprises du Congo (FEC) found at provincial levels in DRC do have some capacity to influence government policy and their members, but interests and priorities typically lean towards fiscal and legal challenges faced by their members. Other private sector organizations exist which may have somewhat less influence but whose priorities may more closely align with gender and ASM, including the National Artisanal and Small Scale Miners Association (NASMA) in Uganda and the National Federation of Mining Cooperatives in Rwanda.
- *African Women in Mining Association (AWIMA)* is constituted of members from multiple African countries and seeks to empower women in the minerals sector. AWIMA receives some support from UN Women for participation in workshops, conferences and events and is seeking to establish country-level branches to help advance their networking role.
- *International Downstream Consumers* including Apple, Motorola and others are taking on an increasing role in supporting projects and programs in areas from which they source in the GLR.

Governments

- *Ministries of Mining* have the greatest level of influence on advancing gender equality in 3TGs in the GLR. Although most indicate some commitments to prioritize gender on a theoretical level, consideration of gender in policy and law and allocation of resources (including towards building gender competence of mining institutions) is marginal, suggesting only a moderate level of interest.
- *Mining Agencies and Departments*, such as SAESSCAM in DRC, DGSM in Uganda and DGM in Rwanda, have offices mandated to regulate, oversee and provide support to ASM and therefore moderate levels of influence and interest. Most face major challenges in obtaining resources needed to fulfil obligations of current mandates.
- *Ministries of Gender, Social Welfare and Health* have a high degree of interest in advancing gender equality *in general* although engagement with the minerals sector is somewhat limited, including at decentralized office levels. Given their significance in gender policy-making and oversight role of specific decentralized functions (e.g. related to sensitization campaigns), their increased engagement may help advance necessary changes in the minerals sector.

Regional and International Bodies and Institutions

- *The ICGLR Secretariat* is mandated (among other roles) to support implementation of the 2010 ICGLR "*Regional Initiative against the Illegal Exploitation of Natural Resources*" (RINR). Each pillar of the RINR has significant potential to contribute to gender equality in 3TG mining, with key entry points identified in the *ICGLR Guidelines on Mainstreaming Gender in the Minerals Sector*. Progress towards related objectives has been slow, particularly when compared to other components of the RINR (e.g. RCM) and despite Member State obligations, including under the 2011 Kampala Declaration[49].

[49] Article 16 of the 2011 Kampala Declaration commits all ICGLR Member States to mainstream gender in its natural resources sector policies, including that governing the minerals sector.

- *Donors and Development Partners* are tackling a range of priorities, not limited to:
  - *World Bank* via DRC's PROMINES project (2010-18) and development of a National Gender Action Plan (NGAP). Activities undertaken via the Bank's *Gender and Extractives Unit* has undertaken a number of activities related to research, technical advice to governments and support for dialogues and processes, among others.
  - *DMFA* has been supporting iTSCi traceability efforts in the GLR and, particularly through the *Scaling Up Minerals Traceability Project* is well-positioned to increase its influence on gender and 3TG mining in the GLR.
  - *GiZ* has been the main supporter of the ICGLR Secretariat and several other programs and projects at the nexus of 3Ts in the GLR. This has included work of *BGR* (the technical arm of German support in the minerals sector) and its support to increasing capacity of SAESSCAM, DGM and other key institutions, among work under the Certified Trading Chains project. Gender is an expressed priority of GiZ in BGR in coming phases of work.
  - *USAID* is implementing a large program in DRC is currently underway with a major emphasis on improved ASM governance via increasing the capacity of SAESSCAM to deliver extension services to artisanal miners. If adequately considered, activities have potential to increase gender competence of government and address gender concerns.
  - *UN Women* (particularly via the East and Southern Africa Office, ESARO, in Nairobi) has taken on gender and extractives as a priority theme. Among its efforts include short courses on gender and extractives (currently under development), sponsorship of an annual Regional Gender Sharefair focused on extractives and training of country offices, including on gender and ASM.
  - *Other UN Agencies. UNEP* is currently developing National Action Plans (NAP) to support formalization of artisanal and small scale gold mining (ASGM) in selected African countries. Although driven by the need to address mercury pollution associated with ASM, the approach shall address multiple facets of formalization and UNEP has expressed interest in integrating gender throughout. With support from the ACP-EU, *UNDP* is currently initiating 3-year projects in 40 countries (including Uganda), concerning *Neglected Development Minerals* (e.g. industrial materials, semi-precious stones) targeting vulnerable persons (and women in particular) in mineral production.
- *African Mining Development Center (AMDC)* with support from the African Development Bank (ADB) and UNECA to develop the African Mining Vision and support countries in developing Country Mining Visions. Research has been supported related to gender and ASM and the agency has potential to exert even greater influence, particularly in the policy space.

Civil Society, Non-Governmental Organizations, Academia and other Actors

- *iTSci, Pact and Pact Partners (e.g. BEPAD, ARDERI)* are fully integrated and respected within minerals sector of DRC, Rwanda, Burundi, Uganda and beyond. Furthermore, via their regional and site-based officers, Pact is reasonably well-decentralized and coordinated with government, enabling them to have influence from grassroots levels to national and international policy levels.
- *CSOs and NGOs* are effectively engaged to varying degrees on issues related to ASM ranging from child labour (e.g. Children's Voice in DRC), environment (e.g. ECO in Uganda) and women's equality in the minerals sector (e.g. WIAMO in Rwanda). Many are well-positioned to respond to gender concerns at grassroots and advocacy levels with support from partners.
- *Academia* is producing a growing body of research on issues spanning gender, ASM and conflict in the GLR, much of which is referenced herein. With support from IDRC, Carleton University in Ottawa is currently undertaking research in DRC, Rwanda and Uganda on gender and artisanal mining in partnership with PAC, WIAMO (Rwanda) and DRASPAC (Uganda), and is planning to deliver a related short course on Gender and Mining Policy, Law and Governance.
- *Other International Actors* active in this space have included Human Rights Watch, Global Witness, International Peace Information Services (IPIS) and many others. With support from the Government of Canada (DFAIT), Partnership Africa Canada (PAC) is providing ongoing technical support, training and guidance to the ICGLR Secretariat and Member States, creation of a civil society platform used for OECD-DDG related training and dialogue, and, under its

"Just Gold Project" efforts to establish closed pipe systems for gold traceability, among others. Gender and ASM is a programme priority.

5.2 Research

Critical lines of research have been identified and should be prioritized by academia and supported by donors and governments seeking to advance the discourse[50]:

- Qualitative and quantitative research on the gender dimension of 3Ts and, in particular, reasons for women's lower participation in the sector when compared to gold and different dynamics between them. Within this, it would be useful to understand if tin, tantalum and tungsten also differ, potentially given the nature of the different hierarchies (and different market forces) at play as well as technical differences (suitability for alluvial versus hard rock, need for mechanization) affecting types of power structures that emerge.
- Qualitative, participatory research in ASM sites and surrounding economies to further understand when, why and how women and girls currently and successfully navigate power and authority structures as a means to identify strategies to advance transformative change. Given the potential for such shifts to, in particular, exacerbate SGBV where men's dominance may be threatened, this work should also examine strategies used to mitigate risks when gender relations are challenged.
- Quantitative research to help counter the invisibility of women's and girls' work in ASM and ASM communities. Most data are vague estimates that are rarely disaggregated by role and gender and, particularly for informal ASM and interdependent non-mining livelihoods, are insufficiently rigorous to inform planning and effectively lobby key actors. Understanding economic contributions (and multiplier effects of ASM) would enhance advocacy contributions even further.

While work is also needed in DRC, given limited research in Rwanda, Burundi and to a lesser extent Uganda, these should also be targeted for research at both national and community levels. In all cases, consideration of diversity within groups (e.g. age, ethnicity, gender) is needed. Notably, the number of individuals and organizations conducting such research is growing and support for knowledge sharing would advance the discourse considerably.

5.3 Policy

International and national policy, law and institutions engaged in formalization of ASM and its trading chains and advancement of gender equality in the GLR are recommended to:

- Honour commitments made by ICGLR member states under the 2011 *Kampala Declaration on the Fight against Sexual and Gender Based Violence in the Great Lakes Region,* among which include obligations to mainstream gender in respective minerals policies. Participation in related training (including that proposed by UN Women and Carleton University, described in Section 5.1) should be supported to build requisite competence.
- The ICGLR Secretariat should mainstream gender in the 6 tools of the Regional Initiative on Natural Resources (RINR), including those related to Tool #1: Regional Certification Mechanism and Tool #4: Formalization of ASM. Specific guidance is provided in "*ICGLR Guidelines for Mainstreaming Gender in the Minerals Sector*".
- Institutions involved in implementation of ICGLR Regional Certification Mechanism and other formalization efforts (including mining departments and iTSCi) should align efforts with SGBV implementation workplans (as defined under the Kampala declaration), develop internal gender policies, ensure inclusion of gender in workplans, budgets and monitoring and evaluation frameworks, integrate gender in all work functions.

[50] Readers should refer to soon to be published research on women's economic empowerment opportunities in ASM undertaken with support from IDRC by Carleton University, PAC, DRASPAC, WIAMO and local research partners in Uganda, Rwanda and DRC.

- Strategies are urgently needed to report, identify, address and monitor incidences of SGBV in mine sites and communities, which supports compliance with OECD Due Diligence Guidance requirements concerning "*serious abuses associated with mineral extraction transport and trade*". Grievance mechanisms (in companies/cooperatives, communities, local monitoring committees, via ICGLR's yet-to-be instituted whistle-blowing mechanism and others) warrant thoughtful consideration. Given low reporting rates and potential repercussions for victims – including for more pervasive insidious forms of SGBV (e.g. discrimination, intimidation, threats) – deeper thinking of more holistic approaches to identify, track, audit and effectively respond to SGBV are warranted.

- Governments must prioritize gender in current reforms of minerals policy, law, regulations and institutions in coordination with gender ministries and informed by gender analysis. Although each country is currently in varying stages of reform, at each level (policy, law, regulations) entry points to increase gender-responsiveness exist. The aforementioned ICGLR Guidelines provide guidance and training by UN Women and Carleton University would support these efforts. Just a few entry points include[51]:

  - Requirements for companies and cooperatives to establish basic gender policies and embed gender within policies on occupational safety and health, labour and environmental management. Guidelines and templates will be needed.
  - Specifications in law and regulations concerning how and by who ASM organizations (associations, coops, small companies) are formed and operate in order to counter risks of exacerbating gender inequalities further.
  - Inclusion of gender within environmental impact assessment processes, for those operations advancing from "artisanal" to "small" or "medium" status (as required in respective jurisdictions). Consideration of gender implications of environmental, occupational and social risk and impacts as well as corresponding action plans provide a basis for implementation and monitoring of gender strategies. Simplified guidelines can be incorporated for those operations still working at "artisanal" levels.
  - Assessment of implications of protective measures (e.g. ban on pregnant women), clarification of terms and requirements by companies and cooperatives to put in place measures for mitigation (e.g. identification of low-risk work spaces, provision of near site breast-feeding areas, etc).
  - Inclusion of gender targets in emerging local content policies, which often include phased requirements for employment or procurement according to locality, region or nationality but fail to create such targets on the basis of gender.
  - Inclusion of gender in reporting requirements of licence holders, such as gender composition of workforces and gender dimensions of training and recruitment strategies, local procurement efforts and gender implications of environmental, occupational and social incidents that arise.

- Mining ministries should increase coordination with gender ministries to identify focal points for oversight of gender mainstreaming efforts, ensure staff at all levels receive requisite gender training and obtain guidance in policies, work programs and activities. Where gender and social welfare offices are decentralized, improved coordination at grassroots levels should be promoted through collaboration in activities.

- Assess best practice policy examples (from mining and other sectors) whereby women's economic empowerment has been successful achieved, promote conducive national policies and laws (such as Rwanda's 2020 target of 30% women's employment) and support benchmarking of minerals sector policy and law.

- Policy makers should become proactively engaged in the gender and ASM discourse, including regional efforts by UN Women ESARO, AMDC and UNECA, as well as international initiatives (e.g. SDC's ASM Knowledge Hub, which is expected to include gender as a thematic priority).

[51] More detailed guidance shall be outlined in a forthcoming paper by Buss, D., Hinton, J. and Rutherford.

5.4 Practice

Organizations implementing projects, programs and activities (including that related to regulation) are recommended to[52]:

- Conduct targeted training of government, implementing agencies (including NGOs and CSOs), donors, companies, cooperatives and other key actors with the intent of supporting transforming change in mind sets and commitments to action. Support for participation in emerging training courses (e.g. supported by UN Women and IDRC) should also be provided.
- Subtly, systematically and repeatedly include gender issues via activities, scenarios and examples *used in a broad range of training and participatory processes* that prompt gender analysis by and increase women's visibility to stakeholders involved. Entry points range from legal reform processes to technical training programs to environmental, child labour or other sensitization campaigns. Through its repeated inclusion, gender analysis would be normalized as common practice and stakeholders compelled to revisit their own beliefs and roles in perpetuating the status quo with no real cost implication to pre-existing projects and programs.
- Advocate for and support companies and cooperatives to appoint women's focal points, form women's groups therein and establish clear communication mechanisms (across the management hierarchy) and internal grievance mechanisms as well as regular meetings with management.
- Support pilot projects to develop simple, practical company/cooperative policies, procedures and systems (spanning issues of OSH, environment, human rights, community engagement and development, traceability, reporting) that account for gender and human rights dimensions. This would include corresponding codes of conduct, clear lines of responsibility and accountability through the management hierarchy to the mineworker level, internal grievance mechanisms, procedures to evaluate incidents (including related to SGBV) and clear consequences for infractions, basic training systems (e.g. induction, refresher) and communication systems to ensure awareness of policies and procedures at all levels.
- Establish formal training programs in small scale mining (e.g. certificates, vocational training and education) with fixed targets (e.g. 30%) for women miners' participation. Ministries of Education, Mining and supporting partners (e.g. companies) should be supported by donors to pilot and then roll out TVET programs.
- Support formation of associations, groups within and outside of mining entities and address critical training needs of women, girls and disenfranchised men and boys involved in mining in organization formation and strengthening, leadership and advocacy alongside development of skills to improve numeracy, literacy and negotiation skills.
- Provide separate technical training targeting women in critical areas likely to support their economic empowerment, challenge harmful beliefs and reduce women's work burdens, such as improved sluicing methods and prospecting and acquisition of mineral rights.
- Develop and disseminate guidance and materials on best practice in gender and ASM and support peer-to-peer learning targeting mainly women miners, some men miner leaders, cooperative and company leaders and government, via participation in related gender and mining dialogues and visits to good practice sites.

Finally, numerous organizations are seeking to effectively embed gender considerations within their respective thematic priorities at local, national and international levels. These are wide ranging and, among many others, include: governments undergoing mineral reform processes, UN Women's short courses on gender and extractives, UNEP's national action plans supported by the

[52] Detailed recommendations to Pact and the *Scaling Up Minerals Traceability Project* are provided in a separate report to DMFA entitled *"Advancing Gender Equality through the Scaling Up Minerals Traceability Project"* (56p).

GEF Mercury Program, national gender action plans supported by the World Bank, SDCs ASM Knowledge Hub and GLR-focused efforts of DMFA, GiZ, ICGLR, among many others.

Multiple agencies are well positioned to provide the gender leadership needed to spearhead coordination and enhance knowledge sharing between these and sector stakeholders at all levels. Such leadership is urgently needed in order to create a "new normal" in the minerals sector, wherein gender considerations are systematically analysed and addressed as common practice and gender competence is a requisite at all levels. Only then are real gains in women's empowerment and gender equality in the minerals sector likely to be achieved.

Annexes

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Annex 2 A Brief History of Conflicts in the Great Lakes Region

A plethora of literature cites a complex interplay between the multitude of factors supporting the succession of conflicts in the GLR. Among these include the legacy of colonialism, weak post-colonial governance, ethnic clashes and prevailing tensions between groups, civil wars and genocide prompting mass migrations, political and economic upheaval with rapid introduction of democratic and free market conditions, interference by foreign actors, the rampant growth of dispersed and often disconnected militias and rebel factions and poorly equipped, questionably governed State military forces, and many others (Arimatsu and Misty, 2012, Moyroud and Katunga, 2002, Shyaka, 2008).

Violence and insecurity has been well documented in the GLR since the proliferation of slavery and trade in ivory, salt, timber, gold and other commodities in the 16th century and throughout the colonial era under control of England, Germany, France and Belgium. Indeed, the inconceivable ruthlessness of Belgian King Leopold II's regime, including "*methodical rape of entire villages*" was "*practically a euphemism for colonial brutality*" (Mechanic, 2004: p. 7). Following independence, the GLR endured the despotic reigns of Mobutu Sese Seko in DRC (1965-1997) in DRC, Idi Amin (1971-1979) and Milton Obote (1979-1985) in Uganda, as well countless atrocities during the ethnically-divisive Burundian Civil War (1993-2005) and Rwandan genocide in 1994 (Moyroud and Katunga, 2002, Sikenyi, 2013).

These periods of complete or partial breakdowns of ruling regimes were typically associated with widespread violence, post-transition insecurity and held serious implications for neighbouring States, with regional actors figuring prominently in the persistent and successive conflicts in eastern DRC (Shyaka, 2008). Neighbouring countries including Uganda, Burundi, Rwanda, Angola, Tanzania, Zambia, Namibia, Zimbabwe and Eritrea, among others, have at different times played roles ranging from provision of direct aid and assistance to the DRC government to supporting rebel groups to further their own objectives and, in some cases, using their own military forces to "stabilize" specific regions, many of whom have reportedly done so to benefit from the extensive natural resources (minerals, timber, charcoal etc) therein[53] (Moyroud and Katunga, 2002; Sikenyi, 2013, IOC, 2014).

The interrelationship between the four countries considered in this study and their respective roles in the mineral trade is complex. In the DRC, progressive erosion of infrastructure, administrative systems and public order in the 1970's and 1980's under the despotic regime of Mobutu Sese Seko strengthened the geographic isolation of DRC's distal eastern provinces while further entrenching their economic ties with Rwanda, Uganda, Burundi and other bordering States (IOC, 2014). This coincided with plummeting mineral commodity prices in the 1980's and massive decline in Mobutu's foreign funding sources. In efforts to legitimize his power, including in the mineral-rich eastern provinces, Mobutu sought to establish multi-party, democratic processes and related dialogues in the 1990's (IOC, 2014).

As Mobutu sought to strengthen his power in Eastern DRC by capitalizing on local discontent towards peoples of Tutsi descent (the Banyamulenge), whose citizenship he sought to restrict, tensions between Hutus and Tutsis escalated (IOC, 2014). Heightened tensions culminated in the start of the Burundian Civil War in 1993 with genocide following in Rwanda in 1994. Previous support for Mobutu by Uganda and Rwanda waned drastically as the DRC government allegedly supported and/or harboured largely Hutu *génocidaires* and other rebel groups, who were intent on reclaiming power in Rwanda and/or seeking to overthrow Uganda's Museveni (Arimatsu and Mistry, 2012, IOC, 2014). Rationalized by the need to protect its borders from incursions by rebels, Rwanda decided in 1996 to pursue the *génocidaires* into DRC with assistance from neighbouring Uganda. Together, they supported formation and arming of a loose coalition of rebels (*Alliance des forces démocratiques de libération du Congo,* AFDL) led by Laurent Kabila. A period of intense violence followed, culminating in the overthrow of Mobutu and installation of Kabila as President in 1997 (Arimatsu and Mistry, 2012).

Relations between Kabila and neighbouring Rwanda and Uganda degraded quickly with the continued presence of the Rwandan and Ugandan armies (Rwanda Patriotic Army (RPA) and Uganda People's Defence Force (UPDF)) in eastern DRC and allegations of Ugandan and Rwandan interests accumulating land, businesses and natural resources (minerals, timber) from the area (Arimatsu and Misty, 2012). The next five-year wave of horrific violence commencing in 1998 as RPA extended its control across several towns in eastern DRC and joined forces with the UPDF and the newly formed *Rassemblement Congolais pour la Démocratie* (RCD) (ibid). With Angola, Namibia and Zimbabwe providing support to Kabila, a total of eleven countries ultimately became engaged in the "Second Congo War" (IOC, 2014). As the RCD splintered into Ugandan- and Rwanda-supported factions, multiple new and often unpredictably aligned rebel groups emerged across the region and rapidly consolidated their interests across specific, resource-rich areas of the eastern provinces (Animatsu and Misty, 2012, Moyroud and Katunga, 2002).

Following Kabila's assassination in 2001, assumption of power by his son Joseph and prolonged negotiations within an Inter-Congolese Dialogue, a Peace Accord was signed in Pretoria in 2002 and foreign military forces reportedly left the country by 2003 (IOC, 2014). As the largest Peacekeeping force in UN history, MONUC, was deployed[54] and the national Army was reconstituted as the *Forces Armées de la République Démocratique du Congo* (FARDC) while absorbing many of the armed groups active in the conflict (Animatsu and Misty, 2012).

Despite subsequent adoption of a new constitution and "democratic" election of Joseph Kabila in 2006[55], and although some progress has been made by FARDC and MONUSCO, by mid-2014, more than 25 armed groups were still active in perpetuating violence, insecurity and plundering of resources in eastern DRC. The eastern provinces continue to experience regrouping of militias and spawning of new rebel groups, ethnically associated movements and community militias ('Mai Mai') (IOC, 2014), although much progress has been made in stabilizing large areas (discussed in Section 2.1.1). As FARDC and its peacekeeping partners gain traction in certain areas, the situation is dynamic as control over other large tracts of ground shifts between often disparate armed groups who are diverse and evolving in terms of resources, capacities *and* motivations, which typically range between political, economic, ethnic self-defense and criminal (Animatsu and Misty, 2012, IOC 2014).

[54] The former UN peacekeeping mission was MONUC (*Mission de l'Organisation des Nations Unies en République Démocratique du Congo)* and current mission is MONUSCO (*Mission de l'Organisation des Nations Unies pour la stabilisation en République Démocratique du Congo)*

[55] Numerous violations of human rights and freedoms have been documented in association with this and subsequent processes in DRC. Among these, Refer to: Human Rights Watch (2008), *We will crush you: The restriction of political space in the Democratic Republic of Congo,* HRW publ. United States of America, ISBN: 1-56432-405-2