A social relations of gender analysis of artisanal and small-scale mining in Africa’s Great Lakes Region

Katrine Danielsen & Jennifer Hinton


To link to this article: https://doi.org/10.1080/00083968.2019.1676807

Published online: 05 Mar 2020.
A social relations of gender analysis of artisanal and small-scale mining in Africa’s Great Lakes Region

Katrine Danielsen\textsuperscript{a} and Jennifer Hinton\textsuperscript{b}

\textsuperscript{a}Sustainable Economic Development & Gender, KIT Royal Tropical Institute, Amsterdam, Netherlands; \textsuperscript{b}Institute of African Studies, Carleton University, Ottawa, Ontario, Canada

\textbf{ABSTRACT}
Much research on gender and artisanal and small-scale mining (ASM) has tended to focus on describing the different roles women undertake in mining, while there has been less attention to how gender relations are constructed, reinforced and challenged within ASM. Drawing from desk and field research in the Great Lakes Region of Africa, this paper presents a framework to analyse gender dynamics in ASM along four interrelated dimensions of gender relations: division of labour; access to and control over resources and benefits; decision-making; and gender norms. The authors argue that unequal gender relations in ASM are mainly legitimized by gender norms that produce, and are reinforced by, the varying abilities of women and men to make decisions and control resources. Findings also describe the diversity and instability of gender relations, and demonstrate how gender inequalities can be and are being challenged by women miners.

\textbf{KEYWORDS}
gender; social relations; women; artisanal and small-scale mining (ASM); Great Lakes Region

\textbf{RÉSUMÉ}
De nombreuses recherches sur le genre et l’exploitation minière artisanale à petite échelle (EMAPE) ont eu tendance à se focaliser sur la description des différents rôles que jouent les femmes dans le secteur minier, alors que moins d’attention a été prête à la façon dont les relations entre les genres sont construites, renforcées et remises en question dans et à travers l’EMAPE. À partir de recherches documentaires et de terrain dans la région des Grands Lacs en Afrique, cet article présente un cadre d’analyse de la dynamique de genre dans l’EMAPE, selon quatre dimensions interdépendantes des relations de genre: division du travail; accès aux ressources et aux avantages, et contrôle de ceux-ci; prise de décision; et normes de genre. Les auteurs soutiennent que les relations inégales entre les genres dans l’EMAPE sont principalement légitimées par des normes de genre qui produisent et sont renforcées par les capacités variables des femmes et des hommes à prendre des décisions et à contrôler les ressources. Les résultats décrivent également la diversité et l’instabilité des relations entre les genres, et démontrent comment les inégalités entre les genres peuvent être et sont remises en question par les femmes dans le secteur minier.
1. Introduction

How are gender relations constructed, reinforced or challenged within and through artisanal and small scale mining (ASM)? In order to examine this question, this paper synthesizes and reframes the increasingly rich work on gender and ASM in the Great Lakes Region (GLR) of Africa along four dimensions of gender relations: gender division of labour; access to and control over resources; decision-making; and gender norms. In doing so, this paper aims to increase understanding of the interplay among multiple factors that jointly produce gender outcomes, thereby providing insight into how unequal gender power relations can be redressed.

Mining and trade of tin, tantalum and tungsten (3Ts) and gold in the GLR is often cited, alongside trade of ivory, timber and other commodities, as one of the core drivers of the successive violent conflicts in portions of eastern Democratic Republic of Congo (DRC), including by providing the financial resources needed to sustain the “war economy” (Arimatsu and Mistry 2012; Sikenyi 2013). Horrific atrocities on a startling scale have been well documented, and those who survive continue to endure extreme physical and psychological trauma, stigmatization, loss of livelihoods and widespread poverty (Côté 2014; Insight on Conflict 2014; Mechanic 2004). This situation has justifiably prompted a range of global, regional and state responses, including those aimed directly at extracting 3Ts and gold from financial flows of armed groups (Hinton 2016).

The ASM workforce producing 3Ts and gold in the GLR is estimated to be on the order of 300,000, and trade regulations have had far-reaching impacts, including on tens of thousands of miners and their families, and economies (Hinton 2016). Effects extend to mines beyond armed group control in eastern DRC as well as in neighbouring Burundi, Uganda and Rwanda. Given that women and girls constitute significant proportions of the ASM workforce in the GLR (ca. 10–15% of which are women in 3T sites and 25–50% in gold sites), the study on which this paper was grounded provides insight into gender dimensions of the status quo and the impacts of these international and national responses to the sector.

Given different socio-economic, cultural and political circumstances across and within the region, in-depth examination of the complexity of this situation and similarities and differences between jurisdictions, commodities and other contextual factors is beyond the scope of this paper. Application of the gender analytical framework presented herein nevertheless provides greater insight into how gender and ASM can be more deeply understood, thereby providing a tool to ascertain root causes and therefore more workable solutions to address unequal gender power relations and resulting gender inequalities within the ASM sector.

2. Methodology

The conceptual framework outlined in this paper was applied to a Dutch government-commissioned study on the gender dimensions of the production and trade of 3Ts in the GLR that was authored by Hinton (2016), with substantial input from the primary author of this paper. This gender and 3Ts study included a desk review spanning the nexus of ASM, gender and conflict in Burundi, the DRC, Rwanda and Uganda, as well as field research in the DRC and Rwanda.
For the desk review, academic literature from across the social sciences and practitioner/policy-based literature was synthesized. Key questions and gaps from the initial literature review informed the development of methodological tools, which were applied in the field in Rwanda and DRC over a period of 4 weeks in 2016. Field research involved six ASM site assessments and semi-structured interviews, focus group discussions and local consultative meetings with 27 men and over 100 women. This was supplemented by consultative meetings with government, civil society and private sector stakeholders in Kigali, Entebbe, Goma and Bukavu. The final 3Ts study represented an integration of findings from both desk and field research.

Drawing from findings from the gender and 3Ts study (Hinton 2016), this paper presents the rationale and key elements of the gender relations framework, thereby providing a novel basis through which to examine gender relations in ASM and giving deeper insight to potential solutions to gender inequalities identified therein.

3. Reframing gender and ASM

A recent review of key debates in relation to women, mining and development (Jenkins 2014) concluded that women’s situation in mining is under-recognized and under-theorized, calling for more critical analysis of gender power relations that structure women’s involvement in ASM. These findings resonate with gaps in the discourse identified by Hinton (2016). While ASM researchers, activists and practitioners use and apply the concept of gender in different ways, Hinton found that one common understanding is to view women and men as having different, socially ascribed productive, reproductive and social roles that give rise to different needs (Hinton, Veiga, and Beinhooff 2003; Lahiri-Dutt and Macintyre 2006; Lahiri-Dutt 2011; Jenkins 2014). This understanding of “gender as difference” highlights the different roles of women and men in ASM within their households and communities and in the mines, with gender roles referring to behaviours, tasks and responsibilities that are allocated to women and men in a given society because they are considered appropriate to them (Hinton 2016).

Much ASM research and practice justifiably emphasizes the often profound negative implications of mining on women due to their ascribed gender roles, including widespread sexual and physical violence and risks posed by low-status jobs performed by women and girls (Hinton, Veiga, and Beinhooff 2003; Jenkins 2014; Hinton 2016), yet the understanding of “gender as difference” is too limited. It is problematic because a fixed essence gets attributed to the category of “women” in general and women miners in particular. As the rich body of gender theory and practice demonstrates, significant variations exist in the situation of women depending on the wider social, political, economic and racial inequalities of which they are part (van Eerdewijk and Pyburn, forthcoming). The gender and development literature also shows that approaching “gender as difference” results in portraying women as working and functioning in separation from men, with other qualities than men (such as with nimble fingers (Elson and Pearson 1981) and more caring (Cornwall, Harrison, and Whitehead 2008)), and with other motivations than men primarily derived from their social reproductive roles. This essentializing of women and men reproduces stereotypical interpretations of individual difference and conflates women’s needs and their strategic gender interests (Molyneux 1985; Cornwall, Harrison, and Whitehead 2008; Danielsen 2016;
What is more, it results in narratives about women as victims that imply a limit on the possibilities for individuals to act and change (Okali 2012).

Although a roles-based understanding of gender in ASM makes women miners more visible (Jenkins 2014), it is critical to recognize the effect of the relative social positioning of women and men on their individual interests. The conceptual framework of this paper therefore draws on a perspective that views gender as a social relation. The concept of social relations of gender was introduced to shift attention away from looking at women and men as isolated categories, to looking at the social relationships through which they were mutually constituted as unequal social categories (Whitehead [1979] 2006; Kabeer 1994; Kabeer and Subrahmanian 1996).

Social relations of gender explain why women and men are valued differently and affect their relative opportunities and life chances, particularly their divergent access to and control over resources and decision-making (Danielsen and Wong 2014). A gender relations lens implies an acknowledgement that the social position of people is shaped through social relations of gender, class, age, ethnicity, location (rural/urban), etc. (Kabeer 1994). These social relations are relations of power that are created by people; groups and individuals come to be defined and valued in relation to each other, based on social categories (“women,” “men,” “widows,” a particular ethnic group, etc.). These categories are not neutral: some groups are valued more than others. Social categories are thus hierarchies, and in the gender hierarchy “women” as a category generally will be found below that of “men” (Mukhopadhyay et al. 2013).

Social relations of gender are understood as specific forms of power relations between men and women in a given society (Kabeer 1994; March, Smyth, and Mukhopadhyay 1999). They are dynamic, subject to change and context specific. Although the opportunities and constraints of women are affected by their position in the household, this does not mean that gender relations are exclusively located in the household. On the contrary, gender relations also operate in institutional structures at the community level, value chains and markets, as well as in legal and policy environments (van Eerdewijk and Pyburn, forthcoming). Gender relations are legitimised and entrenched by gender norms, which are collectively held definitions of how women and men, and girls and boys, should behave and interact and with what resources (van Eerdewijk et al. 2017). Gender norms shape what is possible and impossible for women and men, and this occurs through sanctions or coercion. They are constantly being contested and negotiated, and different co-existing norms might contradict each other. Women’s agency can be both constrained and enabled by gender norms (Pearse and Connell 2016).

Systemic differences in women’s and men’s position in society are created and reproduced through social relations of gender – not only between women and men, but also among women and among men (March, Smyth, and Mukhopadhyay 1999). While all women are in some way or another subject to gender subordination, other social relations of class, age, ethnicity, location, etc. combine to determine each person’s social position and contribute to a heterogeneity of women’s experiences (Yuval-Davis 2006; Colfer, Basnett, and Ihalainen 2018).

4. A framework for analysing social relations of gender in ASM

The social relations of gender lens described above has been translated into a specific focus on four dimensions of gender relations: gender division of labour; access to and control over resources; decision-making; and power in sexual relationships.
resources and benefits; decision-making; and gender norms. The framework is depicted in Figure 1.

This framework helps to unpack how gender relations play out in the four dimensions, and provides the basis for identifying critical connections within and between the different dimensions. It draws on writings on gender analysis frameworks, including women’s empowerment (in particular Kabeer 1994; Kabeer and Subrahmanian 1996; March, Smyth, and Mukhopadhyay 1999; Mukhopadhyay et al. 2013; Mukhopadhyay 2016; van Eerdewijk et al. 2017), as well as on the rich body of literature on gender and agriculture (in particular Doss 2001; Peterman, Behrman, and Quisumbing 2010; Meinzen-Dick et al. 2011; Okali 2012; Ragasa 2012; van Eerdewijk and Danielsen 2015; van Eerdewijk and Pyburn, forthcoming).

The first dimension of the framework is the gender division of labour, which concerns gender analysis of different functions, tasks and roles of women, girls, men and boys across systems of mineral production and trade as well as in livelihoods, economies and communities that form around ASM. As the allocation of tasks to a particular gender takes place in the context of social relations, it inevitably leads to a gender divisions of skills and profoundly shapes the identity of the gender responsible. That means examining the influence of ASM households’ gender division of labour and skills on women miners. The focus is on the implications of women’s and girls’ roles, organization of labour, and constraints and opportunities to participate in and benefit from different aspects of ASM.

The second dimension concerns gender norms. In the ASM context it is relevant to examine the extent to which women’s labour – in mining, in social reproduction, in the community or elsewhere – is recognized in that a value is attached to it through pay and/or status by individuals and groups they relate to on a regular basis. Analysing this dimension is likely to reveal some major assumptions behind the gender division of labour in ASM as well as those concerning the other dimensions of the framework (e.g. who normally decides, who should control mining areas). In addition, other strong norms and values affecting women’s roles, constraints and opportunities should be examined, including norms related to the appropriateness of women as miners, as these manifest themselves at household, community and policy levels.

Access to and control over resources is the third dimension in the analytical framework. Resources can be defined in terms of human resources such as labour, skills and health. And they can be tangible (e.g. money, technology, land and minerals) or intangible (e.g. information, justice, social ties and contacts). Resources are used to get things done, and their use

![Figure 1](image-url). Four key dimensions of gender relations in artisanal and small-scale mining (ASM). Building on van Eerdewijk and Danielsen (2015).
generates benefits. Gender analysis entails examining how resources and benefits are distributed by gender and how this is affected by gender relations. Unequal distribution of resources, such as income from mining, and mineral rights, between women and men is referred to in terms of access to and control over resources and benefits, where access refers to the opportunity to use it, whereas having control is being able to define and decide its use (and commonly, therefore, benefits of its use). A key resource related to control is labour, both one’s own and the labour of others in or outside the household and mining sites.

The fourth dimension of the framework is decision-making, which concerns the analysis of who is involved in which decisions in ASM, and unpacking the nature of that involvement. Gender relations are social relations of power; in other words, power is not an individual issue but a social issue, and it is relational. Power gives people the authority and ability to act, which includes two related forms of power: power to (ability to act) and power over (ability to influence others). In this paper, the analysis considers decisions around women’s work in mining and around income earned. This dimension of decision-making is strongly related to the second dimension of the framework because gender norms can reinforce power relations in ASM households and communities. It is also related to the third dimension as control over resources and benefits concerns being able to decide their use.

5. Findings

Drawing on the findings from the Hinton (2016) study on gender dimensions of 3Ts, this section examines gender relations in ASM in the context of their four mutually reinforcing dimensions.

5.1. Gender division of labour

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, roles which are largely dominated by men (Hinton 2016; Perks et al. 2015). Although trading minerals is often viewed to be a “step up” from manual work, women who work as petty traders take a high financial risk and often work at a loss.

Alongside their commercial roles, women and girls typically have intensive domestic responsibilities. In many ASM areas, women miners commonly work four to eight hours more per day than men, which in turn generates physical and psychosocial health and other impacts (Eftimie et al. 2012). Domestic responsibilities have been used by mine owners and managers as a justification to deny women jobs (Perks et al. 2015) and undoubtedly produce a burden of work that hinders time available for work in the commercial and social sphere that are also essential to women’s upward mobility (e.g. through social networks) (Hinton and Wagner 2011).

Given extensive domestic responsibilities, coupled with comparatively low incomes in ASM, many women in ASM sites work with their babies and small children at their sides (IPEC-ILO 2004). Child labour still provides a coping strategy, particularly for the poorest families, a situation made worse in the event of incapacitation of a family member, a drop in mineral prices or other shocks. This often prompts the removal of, first, girls from school, and then boys. Despite this, many examples exist where boys and girls attend school because of their parents’ direct and indirect work in ASM (Hinton et al. 2011; Cuvelier et al. 2014), and in
many ASM sites, children of primary school age in particular are conspicuously absent for this reason (Hinton et al. 2018). In Sierra Leone, Maconachie and Hilson (2016) found that children were, in fact, unlikely to attend school were it not for the incomes they derived from ASM. Although women’s low socio-economic status may be linked to many children’s entry into mining, far too much research, policy and practice equates the needs, priorities and capabilities of women with those of children (Bashwira et al. 2013). This has been used to justify protectionist legislation that often contradicts the articulated interests of women (and provides the basis for exclusion from certain or any work in 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.

Environmental impacts arising from ASM activities can have far-reaching gender implications for women’s work burdens. Large tracts of farmland can be excavated for mining, often with compensation paid to the “land owner,” usually the male household head. This comes with negative consequences for women, who likely see nothing of the payment, while facing greater challenges to provide for household food security as they lose access to land for growing subsistence crops (Hinton, Veiga, and Beinho 2003).

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 water-borne diseases (Hentschel, Hruschka, and Priester 2002). In addition to the excessive demands of day-to-day responsibilities, the unpredictable frequency and duration of ASM-related illness and injury pose a clear challenge for women who are commonly charged with tending to the sick (Hinton 2016). Serious injury or illness of a spouse may provide the impetus for women to enter into mining, many of whom face constraints to accessing the most lucrative work. Specifically, the most lucrative activities in extraction or mineral processing are performed by teams wherein members have differentiated functions. Consistent, reliable participation in such teams is often an essential condition of membership (DRASPAC 2015). This expectation undoubtedly extends to other mining-related businesses in which women work such as 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.

Implications of women’s work burdens include reduced and inconsistent availability for commercial activities as well as restricted socialization time, with consequences for women’s access to information, participation in organizations, and benefits of social networking, among others (Hinton and Wagner 2011). These outcomes further reinforce gender norms that, among other things, exclude women from mining jobs in general and higher paying jobs in particular, as examined in the next section.

5.2. Gender norms

More lucrative jobs in extraction are often perceived as “masculine,” requiring strength that women are not seen to possess, as exemplified by statements such as “heavy objects are sometimes better lifted by men” (Hinton 2011, 47). In surveys conducted in the Kivus in DRC, only 1 in 5 men and fewer than 1 in 5 women believed that women had the right to work in
extraction, suggesting that both men and women held perceptions of capacity to do physically demanding work (Perks et al. 2015).

Despite these contentions, women have been found at 3T mines in Rwanda working underground to depths of approximately 150 metres hoisting ore and waste rock, and using jackhammers with jacklegs, as well as in gold sites across the GLR. Generally, however, restrictive beliefs concerning women’s lack of capacity have extended at a number of 3T sites in the GLR to the operation of sluices – also one of the highest paying jobs at 3T ASM mines. Ironically, use of sluices by women is widespread in many areas and it is far less physically demanding than many other jobs in the mines. This on the one hand suggests that beliefs concerning women’s lack of capacity may be perpetuated (consciously or otherwise) to limit women’s access to this higher paying work. On the other hand, it suggests that seemingly static or fixed gender norms and beliefs are, in fact, variable and changing.

Many cultural taboos also influence women’s exclusion from work in mines, and in extraction in particular. For example, in numerous countries women’s presence in the mine is believed to make minerals “disappear”; and if a woman whistles near a mining area then an accident will occur, among others (Heemskerk 2000; Dreschler 2001; Synergy Africa 2001; Hayes and Perks 2012). Some men seem to believe that women are likely to engage in sex with co-workers in this male-dominated environment. As stated by a woman tin miner, “It is 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 [without] … engaging in any sexual relations” (Quoted in DRASPAC 2015). Sex is, however, used as a coping strategy for a number of women. In one Ugandan tin mine, incidences of women trading sexual favours to receive help from men with 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 in DRC, Perks et al. (2015) found that 13.7% of women at some point had traded sex for access to work in mine sites, restaurants and other jobs. Notably, Perks et al. (2015) found that single and married women were less likely to engage in sex work than widowed or divorced women were, suggesting sex as a coping strategy is used by women more likely to face economic and social exclusion.

Women working in mines in Rwanda seem to take greater efforts to convince family and community members that their jobs are not linked to the sex trade. This could be due to fear of sanctions, such as the case of one woman miner who explained that she had been temporarily banned from a local church after she took up work in a mine. 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.

Such beliefs seem to be operationalized at all levels – from miners at the site and supervisors to Civil Society Organization (CSO) representatives and traditional leaders to mining authorities and policymakers. 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 in DRC, one officer from Service d’Assistance et Encadrement d’Artisanal et Small-Scale Mining (SAESSCAM) in South Kivu suggested that women’s participation in sluicing would physically impair their
sexual performance but their bodies were used to the arduous, low-paying job of haul-
ing ore.

At the policy level, laws in DRC and Rwanda 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). The resulting expulsion of pregnant women from mines has had dire implications for the health and well-being of these women and their families, and in some cases have been extended to women who may be pregnant and to elderly women.

Although harmful gender beliefs of authorities are operationalized in many ways, perceptions that view women favourably tend to have less significant effects in organizing behaviour and actions of mining stakeholders. For example, cooperative and company management at many 3T sites cited challenges in achieving consistent production, with many expressing the view that the main cause was men’s tendency to abscond from work once paid, while noting that women tend to be more reliable (and in some cases have higher documented productivity). Despite this, strategies to mobilize and retain women workers were few and far between. Similarly, women are often perceived to be better money managers and more likely to spend earnings on family well-being; as one manager observed, “We 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, yet seem nevertheless to be insufficient to challenge those norms that keep most women on the low end of the hierarchy.

Gender norms may be best challenged through the dissemination of examples where these beliefs have been contested. 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. It seems that many such women tend to have male relatives who in one way or another are well established in mining, which might not be the only reason why these women do well, but which highlights the barriers facing women without access to such intangible resources as lucrative social ties. Some successful women may face new challenges from beliefs creating a “stigma of success,” prompting efforts to undermine a woman’s achievements, even by other women. Women cooperative leaders and negociants (local buyers) 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.” In any event, whether women improve their social status through increased income as a miner or gain more lucrative jobs or prominent positions as local business owners, these women pioneers are critical to challenging restrictive beliefs and norms at community and national levels. Although these examples highlight how women’s improved access to and control over resources can effectively challenge gender norms, similarly their lack of access and control can also serve to sustain or reinforce harmful norms, as examined in the next section.
5.3. Access to and control over resources

Although a multitude of resources – ranging from skills, tools and equipment to justice and the rule of law – directly impact women’s bargaining power and relative status, three core resources provide insights into the significance of access to and control over resources: money, mineral rights and lucrative work.

5.3.1. Money

When ASM is undertaken within a family unit, women’s work is quite often unpaid and conducted to supplement their husbands’ earnings (Amutabi and Lutta-Mukhebi 2001; Labonne 1998; Matthyssen 2015). Even when women are paid for their labour, they are often constrained to the lowest paid positions and, in any event, often have marginal influence on decisions concerning the use of their income, particularly in the case of married women.

Women who are single, divorced or widowed may have greater control over the use of proceeds from their efforts within the household, 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 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 results in many other injustices (such as cheating, scams or non-repayment of debt) that further impede women’s ability to benefit from the fruits of their labour (Côté 2014).

Access to capital for equipment or to start a business is a frequently cited constraint in ASM areas. Women can face multiple challenges accessing capital (agency, numeracy, literacy, etc.): they may need bank approval from their husbands or male family members, and often require collateral, especially land. The 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 purchasing land without permissions from husbands or a proxy (e.g. shemeji, a male relative in Swahili); insufficient capital or freedom to use it; and lack of influence on decisions concerning land (Perks 2008; Perks et al. 2015; Hinton 2011).

Many women obtain small loans through their participation in village savings and loans associations (VSLAs) formed either 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). Such groups can provide a platform to increase women’s capacity to voice concerns to management or authorities and lobby for necessary changes (e.g. Nyabibwe in DRC).

5.3.2. 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, by legal status, by force (e.g. by armed groups) or by informally conferred rights (e.g. by land owners or traditional authorities).

Access to legal rights (claims, concessions) is determined by legislation that often contrasts with the reality of social power relations and can include requirements that provide hurdles that may be insurmountable, particularly for women and in the absence
of outside support or intervention. While literacy poses obvious constraints for many, a woman’s lack of agency and structural barriers (e.g. norms, low social status) can affect her capacity to travel to often distant 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 with issuing authorities – who might or might not demand additional money. Similar constraints likely also apply when rights are conferred by landowners or local chiefs, while armed groups may be even more daunting (Côté 2014; Perks et al. 2015). Land resources can play a significant role. 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.

Within licensed or unlicensed ASM areas, few women in the GLR own mines, pits or shafts. Most exceptions seem to be women who are relatively advantaged – economically, by familial or social ties or by education – or women who use, or are used as, proxies for husbands or relatives.

Even once mineral rights are conferred, women may face additional challenges such as in managing and supervising work of male employees, in many cases prompting women mine owners to enlist men to manage operations, as found in Orientale and South Kivu in DRC, Uganda and Tanzania (AMDC 2015; Côté 2014; Auranda Minerals 2015; Hinton and Wagner 2011), sometimes increasing the risk of being swindled (AMDC 2015). Despite this, access to minerals and mineral rights can provide a launch pad for accumulation of other resources and challenging of mindsets (Hinton and Wagner 2011).

5.3.3. Lucrative work

Although examples exist of women using their existing resources to improve their position, most women do not succeed in accessing the most lucrative jobs in mines. 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 hard-rock deposits typically require – at a minimum – work in a team comprised of at least three members and often with approvals of some sort of (formal and/or informal) authority. Similarly, more productive profitable work in 3T processing (e.g. using sluice boxes) also requires work in teams.

Women can face additional challenges to joining a gang beyond those provided by discriminatory beliefs and disparate work burdens. In Kalehe, Mwenga and Walungu in eastern DRC, one reason women could not obtain (or didn’t seek) jobs in high-paying extraction teams was because of the costs of joining (e.g. a goat, a crate of beer or money) (Perks et al. 2015), a situation undoubtedly exacerbated by women’s lack of access and control of money.

In addition to this, other approvals may be required (e.g. from a team leader, mine boss or other authority), and teams (or sites) often set their own rules. In one 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). Women and girls often have much less time, confidence and freedom to develop necessary social ties; and rules, in addition to conditions of membership, also call for prior approvals 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).
While these examples illustrate how women’s lack of decision-making power at the mine site can limit their access to resources (in this case, to lucrative work), linkages between decision-making power in the household and a range of gender outcomes – examined next – provide even deeper insight.

5.4. Decision-making

In ASM communities in GLR, 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 (Côté 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.

Women’s limited participation in decisions about the 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 woman miner stated, “men take charge of the financial resources in the home so they control and own money, land, buildings and everything” (quoted in Hinton et al. 2011, 48).

Gender norms are often closely intertwined with dynamics in the household and reinforce inequitable power relations therein. Examples include requiring a widow to marry her deceased husband’s brother (a common practice among several ethnic groups in parts of the DRC), or practicing the right of “cuissage” where traditional chiefs exercise their right to requisition sex, commonly with young virgins (Côté 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” (cited in Perks et al. 2015, 19).

Linkages between the decision-making sphere and gender norms and beliefs are further reflected by how women are sometimes required 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). Hinton’s field research described how many Rwandan women 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 phenomenon whereby once a woman miner marries (particularly if her spouse is a non-miner), she quits working in the mines to take on more traditional roles in the household. As stated by one woman miner while describing efforts to change mindsets in their families and communities, “now people are starting to understand that mining is a job like others … but still husbands refuse [to allow their wives to continue work after marriage].”

Threats to prevailing power structures in the household provide further justification for this opposition, as expressed by an authority in Rubaya, DRC, who suggested that “if she
makes too much money (working in mining), she will leave her husband” and asked “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 (government officers, company management, miners, CSO leaders) recognize 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 or farming (or, at best, engaging in 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 each 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 formal laws requiring men to take on authority roles. For instance, in Kolwezi, DRC, women who were widowed or divorced needed a male “intermediary” in order to acquire certain assets (e.g. land) (Perks 2008). The status of being husbandless may increase vulnerability in many ways but may also yield benefits derived from increased freedom. Many unmarried women miners in Rwanda expressed their 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 the Laroo stone quarry in Gulu, Uganda, where over 50% of the workforce are women, with many reporting their income has given them more power in the household (Onuh 2002; Anonymous 2004). Similarly, in two 3T mines near 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 mindsets of family and community members, overwhelmingly, women interviewed in Rwanda and the Kivus who managed to achieve more prominent positions in mining areas (negociants, cooperative leaders, pit owners) seem to recognize the 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 the 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. gender norms, capacity to earn and control incomes) on women’s bargaining power within the household and mutually reinforcing relationships between them.
Within the context of relative positions of power, it is important to highlight one of the most common ways that the (im)balance of power is sustained: sexual and gender-based violence (SGBV). Whether it is used to maintain the status quo or to put those who contest norms in their place, SGBV has been widely reported in ASM areas in varying forms. SGBV ranges from the most horrific acts of terror and violence (as documented in conflict zones of eastern DRC) to more insidious forms, such as punitive measures (e.g. withholding payment for services), public humiliation (e.g. security personnel strip searching women for diamonds, as reported by Côté (2014), social stigmatization (e.g. women who use sluice boxes are perceived as sexually dysfunctional) or as a form of sexual corruption (e.g. in order to effect payments for entry into certain work). Ultimately, SGBV is used as a means to reinforce who is in control and who has the power and resources. Perks et al. (2015) found that in South Kivu, women who were divorced, widows or displaced persons were at a greater risk of SGBV than married women, confirming that SGBV can be perpetrated by anyone, often those in a position of greater 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 (Hinton 2016).

Deeper understanding of the linkages among all four dimensions of gender relations provides insight into how SGBV and other mechanisms are used to produce gender outcomes in an ASM context.

6. Interplay of dimensions of gender relations

This paper has unpacked gender dynamics in each of the four dimensions of gender relations as conceptualized in the analytical framework presented at the beginning of the paper. Figure 2 captures our key findings under each dimension and shows how multiple factors interplay (i.e. are influencing one another) and interlock (i.e. are dependent on one another).

Figure 2. Gender dynamics of artisanal and small-scale mining (ASM).
6.1. Gender division of labour and gender norms

Women occupy the most menial and lowest paid positions in mining (Figure 2, dimension 1). This situation is produced and continues to be reproduced by gender norms that constrain women from obtaining more lucrative jobs, and from accessing or retaining employment in the ASM sector. Key gender norms at play here (dimension 2) are those that expect women to do all domestic and care work combined with the low recognition of women engaged in mineral production as miners; beliefs about lucrative mining jobs as masculine, requiring strength and technical know-how which women are not perceived to have; as well as assumptions about mining jobs being linked to sex work. Harmful norms and values by those in authority also get operationalized in policy and legal environments – such as the law in DRC banning pregnant women from undertaking any work in mines – resulting in exclusion and expulsion of women (in many cases pregnant or otherwise) from mining.

6.2. Gender norms and access to and control over resources

Gender inequalities in the sector are reinforced by the ways in which gender norms (dimension 2) affect the capacity of women and men to use and benefit from resources (dimension 3). The widely held belief that “the man is the miner” limits women’s access to a range of resources including skills, services, mineral rights and (higher) incomes (dimension 2 affecting 3). Similarly, the time poverty of women due to the gender division of labour also restricts women’s access to these and other resources (dimension 1 affecting 3). This is further exacerbated as occupational, environmental, health and economic impacts of ASM tend to increase women’s work burdens, with other far-reaching implications for women who are generally not compensated.

6.3. Access to and control over resources and decision-making power

A key dimension influencing gender dynamics in ASM and women’s position is women’s low access to and control over resources (dimension 3). Women are in general less advantaged by ability and authority 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), or to mitigate shocks and stresses (e.g. by selling land or obtaining social support from networks). Control over resources and authority to take decisions are here intrinsically linked (dimension 4).

6.4. Multiple reinforcing factors

Other findings show that decision-making authority is justified by dominant norms as well as ownership of resources (dimensions 3 and 2 affecting 4). Women’s weak bargaining power in household decision-making (including women’s limited participation in decision-making about household income/her own earnings, and women having to obtain permission from their husbands, family or authorities to take on certain mining jobs) is the result of their limited control over resources reinforced by the low recognition of their labour, taboos pertaining to women’s putative role in making minerals disappear, and negative beliefs about what happens if women get more independence (dimensions 3
Indeed, independent decision-making by women is often confronted with social disapproval because women who work in mining are assumed to want to leave their husbands and may be stigmatized given rumours about links between mining and sex work. Thus, independence can come at the cost of losing social capital both within the household and in the community. The implications can be severe, such as gender-based violence, loss of support of family members, and being banned from social institutions such as the local church (dimension 4 affecting dimensions 2 and 3).

The paper also points to how SGBV reinforces male dominance and power in households, mine sites, businesses and communities. This has implications for women’s and girls’ physical and psychosocial well-being and provides a deterrent to the exercise of agency and independent decision-making that may challenge prevailing gender norms and beliefs (dimension 2 affecting 4). Not surprisingly, some women who have been successful in mining choose to underplay their achievements.

### 6.5. Factors challenging gender relations

There are remarkable examples of women having control over the sparsest of resources and who have been able to accumulate resources to challenge the status quo of male privilege and authority. One of the factors leading to this is women’s use of social networks to gain knowledge from relatives, to seek introduction to gatekeepers of power, to learn new practices of successful mineral traders, and to organize in all-women crews. With the newly gained knowledge, contacts, skills and collective strength, these women have subsequently been able to trade minerals and/or acquire the necessary financial resources and sufficient clout to solicit support from government to obtain a mining claim or units within a mine (e.g. a pit, sluice or mill) (dimension 3 affecting 4). These women report increased bargaining power in the household – for instance, to make decisions related to mining jobs and the use of benefits derived from such employment – and in dealing with other forms of authority. Women taking on non-traditional work in the mines – such as use of sluices, working with jackhammers, supervising underground timbering teams, and drilling and blasting crews – and in ASM economies – as pit owners, cooperative leaders, prominent traders and small enterprise owners – seems to be a key factor in changing gender norms and challenging discriminatory and harmful beliefs (dimension 3 affecting 4).

An important finding does not come to the fore in Figure 2, i.e. that between and within ASM sites and communities, women and girls are heterogeneous in terms of age, professional experience, ethnicity, marital and socio-economic status and other factors influencing their positions and power within households and ASM communities and economies. Social inequalities are seldom the result of a single factor, but rather the outcome of intersections of different social relations. This diversity is significant to understanding different women’s and girls’ abilities to influence, navigate and benefit from the ASM system and mitigate impacts therein.

### 7. Conclusions

Bringing together and unpacking the four dimensions of gender relations in the context of artisanal and small-scale mining of tin, tantalum and tungsten in the Great Lakes Region of
Africa offers a nuanced understanding of how gender inequalities are manifested, produced, reproduced, reinforced and challenged. Three main conclusions can be drawn.

First, although much discourse has emphasized the gender division of labour and, to a lesser extent, decision-making power (especially vis-à-vis associations and cooperatives), this paper shows that two key dimensions of gender relations in ASM – specifically gender norms and access to and control over resources and benefits – are central to gender outcomes observed in the sector. The paper further affirms that a focus on gender roles is not sufficient to capture the complexity of gender relations at play and no single dimension or factor can explain gender inequalities in ASM.

Second, multiple factors under the four dimensions interplay and interlock, in most cases serving to undermine women’s position and opportunities to benefit from mining. How beliefs that mining jobs are linked to sex work affect women’s ability to make decisions about their entry into ASM is an example of the interplay of factors. The interlocking of factors can be illustrated by gender norms concerning women’s role in social reproduction that to a large extent determine women’s access to lucrative mining jobs. Unequal gender relations are legitimized by social institutions and gender norms. These institutions and norms result in and are at the same time reinforced by the varying abilities of women and men to participate in decision-making and to take on and benefit from different ASM roles and resources.

Third, gender inequalities in ASM are not fixed, and the status quo can be challenged. Findings also illustrate how participation in ASM and its economies has provided many women with increased incomes and bargaining power, and many examples affirm that women are employing strategies that challenge unequal gender power relations. In other words, gender inequalities in ASM are not universal or fixed; they are diverse and unstable, and they can change and are changing. A deeper understanding of how intersectionality affects agency, access and control is needed in order to more effectively identify truly inclusive, pro-poor pathways out of poverty.

These conclusions speak directly to how policy and intervention are currently conceived and implemented in ASM. While women’s improved access to more lucrative work (and financial benefits derived from such work) and participation in decision-making bodies justifiably warrants attention, tackling gender inequalities in ASM clearly requires a holistic approach that also effectively addresses prevailing gender norms and factors impeding access to and control over resources and the benefits accrued from these resources.

Notes
1. Among these are the Organisation for Economic Co-operation and Development’s OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, the Regional Certification Mechanisms (RCM) and related efforts of the International Conference on the Great Lakes Region (ICGLR), and multiple legal reforms adopted or under review by member states of the ICGLR.
2. Based on van Eerdewijk and Danielsen (2015).
3. Molyneux (1985) defines gender strategic interests as interests arising from women’s subordinate position in the gender division of labour and in relation to resources, and as interests women have in common despite their differences.
Acknowledgements

The authors are grateful to Blair Rutherford and Doris Buss for valuable comments on an earlier draft. The paper draws on work funded by the Dutch Ministry of Foreign Affairs.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Katrine Danielsen is a gender equality and social justice advisor at KIT Royal Tropical Institute in Amsterdam. Much of her work on gender, agriculture and natural resources management is situated at the interfaces between policy, research and practice, such as her work on gender-transformative approaches.

Jennifer Hinton is an internationally recognized gender and mining expert. She has over 15 years of experience addressing social, economic, policy, institutional, technical and environmental challenges in the minerals sector in almost 20 countries.

References


