

Notes from The Field: Use of mixed methods research on Women's Livelihoods in Artisanal Mining in Uganda, DRC and Rwanda



Introduction to project

Tens of thousands of men and women rely on artisanal and small-scale mining (ASM) in the East and Central Region of Sub-Saharan Africa (SSA). With commodity prices strong, particularly for gold and the 3Ts (tin, tantalum, and tungsten), mining activity has escalated across the continent, and national governments are increasingly recognizing ASM as an untapped source of export earnings and tax revenues.

These four minerals are in high demand globally and their extraction is seen as offering African states both potential for economic growth and the risk of increased criminality. At the same time, international consumer demand for ethically sourced, "conflict-free" electronics and other goods, has generated a series of measures to 'regulate' the sector. The artisanal mining of 3T and gold is receiving unprecedented international attention and heightened regulation. Yet little is known about the socio economic impact of these regulations on both men and women who are seeking opportunities in ASM.

This project is part of the Growth and Economic Opportunities for Women (GrOW) program, jointly funded by the UK's Department for International Development (DfID), the William and Flora Hewlett Foundation, and Canada's International Development Research Centre (IDRC).

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"While women's economic roles are essential to ASM, there is little reliable data on their actual activities and the conditions that structure them." (Institute of African Studies)

Problem, research objectives and project design

In some mining sites in the region women make up 50% of the workforce, but their potential for earning income is often limited by the inherent inequalities under certain environmental, social and political conditions of the mine. Lack of knowledge and understanding of women's livelihoods increases the likelihood that policies aimed at legalization and regularization of artisanal mining are unfolding without sufficient analysis of how women will be impacted, let alone the specific barriers they face in ASM. More research is needed to inform national and regional regulatory and policy frameworks to best support women's livelihood options in and around mining sites.

This research project focuses on ASM as an economically important sector in Africa and globally that has potential to increase women's economic empowerment.

Researchers from Carleton University teamed up with IMPACTtransform (formerly PAC) and Development Research and Social Policy Analysis Center (DRASPAC) based in Uganda to investigate the role of women in the mining sector. Since its start in late 2014, this collaborative, multi-disciplinary three-year project seeks to examine the ways in which women contribute to mining activities in selected mining sites of the 3Ts and gold mine sites in Uganda, Democratic Republic of Congo and Rwanda.



The research objectives are:

1. To advance knowledge of women's economic activities in the ASM sector to better understand the range of livelihoods reliant upon this sector and the power relations that condition women's livelihood strategies;
2. To deepen understanding of the barriers to, and solutions for, enhancing women's economic empowerment in the burgeoning ASM sector.

Through a feminist political economy lens the project examined the relationship between production and exchange in the context of women's engagement in mining sites. The project's investigators integrated both qualitative and quantitative research methods. The use of these mixed methods enabled researchers to gather data in complex social, economic and environmental conditions.

The following research methods were used:

- individual surveys,
- focus group discussions,
- life histories, and
- participant observation



Researchers gained a vivid and multi-dimensional perspective on how women navigate these spaces and opportunities presented at the mining sites. Data collected on the gender dimensions of ASM operations revealed the varied mining roles played by women, and the gender dynamics found at different stages of the mining and processing activities. Drawing on comparative perspectives between the three countries and across the various mine sites, the multiple research methods contributed to a deeper understanding of gender dynamics as they unfold in relation to different types of ASM communities.

Six mining sites in the three countries formed the basis of the study. Two sites were based in DRC, one 3Ts site in South Kivu, and a gold mining site in Ituri. In Uganda, researchers gathered data from gold mining sites in the Central region, and one tin mining site in the Western region.

In Rwanda, researchers worked in two 3T sites one in each of the Northern and Southern province.

This methods brief aims to highlight the importance of applying mixed methods to research focused on women's economic empowerment in the mining sector in East and Central Africa.

Participant Observation

"Participant observation provided an opportunity for researchers to work from a more accurate picture of what was actually happening in the various mine sites. " Richard Kibombo, DRASPAC

Research teams based in each country first visited potential mine sites and conducted participant observation, spending an average two weeks in each site. Researchers informally and formally asked questions and observed the various activities occurring at the site, as well as observing and documenting the social, political, economic and environmental contexts in which they occur.

Each researcher then wrote up notes based on these observations, her/his conversations, and encounters in the mining sites that provided an initial sketch of some of the gendered socioeconomic dynamics.

Richard Kibombo from DRASPAC in Uganda mentioned that participant observation ensured that sampling procedures were consistent with the types of activities taking place at the site at certain times of the day:

"We observed the working hours, patterns of movement, the number of women and men at the site and the types of work each were focused on at certain times of the day. Once this was clear, we were able to come up with a sampling strategy that fit the actual social context of the particular sites and the overall research design."

Mr. Kibombo explained that participant observation also revealed that the working hours and patterns of work for both men and women varied, according to the particular roles women took on the site and their opportunities for other mining-related employment. For example, some women at the gold mining site in Uganda work in trading sand (material excavated from mine shafts). This involves early morning trading that concludes by 2pm, allowing the women to move on to other paid and unpaid activities.

A second observation revealed a gendered variation in the depths of pits mined with women working in shallow pits while men worked in deeper pits. As the deeper pits had greater amounts, and better quality of gold, women restricted to shallow pits had limited opportunity for getting more production.

Participant observation also revealed that the particular time of year had an impact on the potential research participants available, with women only seasonally involved in the mine sites during the rains. The rest of the year, women were busy with farming and vegetable gardens.

Based on the findings from the participant observation, high variability in working times and activities between men and women across the sites eliminated the option for random sampling. Researchers on the ground could not guarantee an adequate number of female respondents. The research teams then decided to purposively sample more females than males, if possible, in each site.

Survey

The purpose of the survey was to collect data from six project mine sites across three countries plus one additional mine site in DRC for a total of 7 sites surveyed. Jennifer Stewart, an Associate Professor with the School of Public Policy at Carleton University, led the design and implementation of the survey tool.⁴

Dr. Stewart worked closely with the project research teams based in each of the three countries to develop the survey. The survey provides a detailed overview of the variety of roles and services present in mining sites and how these roles contribute to women's livelihood strategies. While generating important quantitative data, the survey also included some qualitative questions on, for example, women and men's perspectives on the need for changes in the mine sites.



With over 800 respondents across seven mine sites, the survey generated a significant body of data that is still being analyzed. Among the important results are findings on the organizational and gender dynamics of team work in mining sites. The survey found that most respondents (both male and female) preferred to work in groups, whether formally or informally created, yet men are far more likely to work in a team (81% of men versus 59% of women).

The mixed methods approach of the study allowed the team to draw on interviews, focus group discussion and life histories to begin analyzing the differing organizational strategies and structures that shaped team work dynamics and the resulting impact on workers. In some sites, for example, mining companies organized workers and coordinated activities; in others, groups organized themselves led by pit manager and in some groups, male members brought their spouses into the groups.

Dr. Stewart mentioned that after designing and developing the survey collaboratively across three countries with three different research teams, she learned that defining the mine site varied geographically, according to how spaces occupied social and economic activity:

"Defining the mining site in all three countries was a challenge because of the differences between sites mined for gold and the 3Ts and in each country, how authorities described the surrounding environments surrounding the sites. In Uganda, for example, researchers used maps of the mining site showing the demarcation of where the site began and ended. In the DRC, on the other hand, sites were more informally defined, where the actual pits where the mining activities took place only constituted one dimension of the actual mining site."

Focus Group Discussions

Focus Group Discussions (FGDs) were conducted with different groups of stakeholders identified in the participant observation phase. Sixty focus group discussions, involving over 400 participants were held across the six sites. The groups were largely comprised of only men or only women in different tasks (such as women processors, male diggers, male buyers, women diggers, etc.) and a few mixed-gender groups (e.g., of members of the family of the traditional leader).

The Focus Groups covered three main themes: the different livelihood practices pursued by women and men at mine sites; the relationships with authority structures, including gender norms that shape the types of livelihoods; and within livelihoods, the types of strategies employed by women, that are themselves constrained/enabled by these authority relations.

Findings from these discussions informed the final stages of the survey design. For example, researchers modified the questions regarding income. Abby Sebina-Zziwa, a researcher with DRASPAC, explained that some participants felt uncomfortable answering questions regarding their household budgets: "Some participants in the FGDs in Uganda were not comfortable with systematic account of their budget and some became suspicious. Others were concerned for their safety or anonymity or loss of their production from taking part in the discussion and the survey." As a result, survey designers modified the wording and interpretation of the survey questions. Enumerators used a variety of locations to conduct discussion and administer the survey to accommodate these concerns.



Life Histories

Women's decisions to participate in the artisanal and small-scale mining are partly shaped by their life experiences. Hence it was important to examine their histories in order to understand their current situations and livelihoods strategies. By using the life history approach, researchers were able to form a clearer picture of the trajectories of women engaged in mining activities, but those of their families, their communities, the mines, governance and gender relations more broadly.

"By providing a life history, research participants who might have been marginalized in many ways, may, through a process of recounting their own life stories, recognize another value and worth to their experiences and knowledge" (Research Guide)

There are different ways of doing life histories and the researchers in this GrOW project used a series of un-interrupted short stories as told by the respondent after prompting. Ninety-minute informal interviews allowed the researcher to broadly guide the session, while allowing ample opportunity for the research participant to choose what to share. At the same time, in the telling and retelling of a life history, new threads often emerged that were worth pursuing in more detail.

Through life histories, women working at the mine sites shared their experiences of how and why they started working in the sector, challenges they have faced, and how they have benefited from their mining livelihoods. Some women reported they invested in housing for themselves and their children, while others diversified their livelihood options by including some activities in the mine, while maintaining other businesses outside the mine.

Gender Focal Points

At each mine site of the research, gender focal points facilitated the data collection and ensured that both women and men working in the mines contributed to the project. These gender focal points underwent gender training led by country and international gender experts.

Gender focal points were chosen for their "natural" status as female and male leaders within their communities, either engaged directly in artisanal and small-scale mining or indirectly (such as goods and service provision). There was one male and one female focal point for each mining community.

The gender focal points served as a knowledge broker between the researchers and communities. Focal points shared the information and findings from the research with their community members.

Gisèle Eva Côté, a gender specialist with IMPACT, added that the gender focal points helped to identify those previously involved in the mines. "Gender focal points organized women who disengaged from mining for one reason or another." These representatives served as liaisons to communities adjacent to the mine sites, and revealed the ways in which women navigate their livelihood options.



Conclusion

The outcome of this study will significantly advance understandings of the operation of gender norms, beliefs and practices in ASM, and the many ways in which women may operate within, and strategize around highly structured relations of inequality. Through this understanding, the project will generate the contextual information needed for better analysis of policies aimed at formalization of the sector and empowerment of women. Findings drawn from using mixed research methods reflect the complexity of gendered social relations, and how to better support women's engagement in the mining sector. In doing so, this research will lead to developing policy recommendations that respond to the varying political and economic conditions in which artisanal mining continues to expand.