



Promoting Gender Equality and Awareness in the Vietnamese Mining Sector: Perceptions, Challenges, and Policy Recommendations

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Abstract

Females in the industry nowadays have been offered many opportunities to develop their careers. However, the chances are not the same in different areas or sectors. This study investigated the perceptions and understanding of gender-related issues in the mining sector among potential young workers and industry experts in Vietnam. The study employs Oxfam's Gender Impact Assessment Guidelines for extractive industries and the Convention on the Elimination of All Forms of Discrimination Against Women - CEDAW's Women's Economic and Social Rights Framework to assess gender-related issues in the mining sector. A survey of 207 students in Hanoi was conducted, besides focus group discussions and in-depth interviews with gender and mining experts.

Findings reveal significant differences in knowledge and awareness of gender issues between students, emphasizing the need to integrate gender knowledge into specialized fields such as mining. In addition, professionals working solely in the mining sector demonstrated a lack of sensitivity to gender issues. Consequently, the study recommends capacity building, seminars, and exchanges to help mining professionals incorporate a gender perspective into their activities.

Current policies exhibit gender neutrality, indirectly excluding women's participation and compromising men's safety in the mining sector. The study proposes policy recommendations for enhancing the protection of workers in the mining industry and promoting gender equality. These include incorporating gender perspectives into relevant laws, raising awareness of gender issues among policymakers and professionals, and increasing the mining sector's presence in the media to encourage youth to pursue careers in this field.

Keywords: Gender equality, gender knowledge, gender perspectives, extractive industries, mining sector

1. Introduction

The mining industry plays a crucial role as one of the main sources of revenue for many countries and is a focal point for economic growth and social development, particularly in resource-rich nations (Abrahamsson & Johansson, 2021; Johansson et al., 2020). However, in the natural resource extraction sector, social welfare, cultural preservation, local livelihoods, and polluted environment. Mining activities lead to land transfers, forced relocations, increased poverty among local communities, unstable security, violence, and crime (Hicks, 2011; Khoáng Sản – Phát Triển – Môi Trường: Đối Chiếu Giữa Lý Thuyết và Thực Tiễn | Trung Tâm Con Người và Thiên Nhiên, n.d.; Why Extractive Industry Gender Advocates Should Ask For Contract Transparency | Natural Resource Governance Institute, n.d.; T. K. T. Nguyen, 2020). Women and children in affected communities become landless laborers, often falling victim to human trafficking, violence, and health issues such as reproductive health, malnutrition, and poverty (Camey et al., n.d.-a, n.d.-b; Ringblom & Johansson, 2020). Additionally, the voices of women are not adequately heard by policymakers, and their participation in mining-related policy-making processes is not addressed (Abrahamsson & Johansson, 2021; Camey et al., n.d.; Johansson & Ringblom, 2017; Ringblom & Johansson, 2020). Gender inequalities in employment and women's participation can harm business operations, as well as have negative impacts on society and the local economy (Eftimie et al., 2009; Fernandez-Stark et al., 2019; Women, Business and the Law 2020., 2020). Conversely,

enhancing gender equality by empowering women can improve the labor force, bring business benefits, and result in long-term outcomes for health, education, and local development. Raising awareness of gender aspects in mining can help ensure that women are supported and have positive outcomes in this industry (Camey et al., n.d.; Eftimie et al., 2009; Fernandez-Stark et al., 2019; Hicks, 2011; Mundoli, 2013; N. Nguyen et al., 2018; T. K. T. Nguyen, 2020).

This research is important as it focuses on the roles and participation of both men and women in the mining industry. By exploring gender aspects in this field, the study helps us gain a deeper understanding of the social differences imposed on men and women and the impacts of mining activities on different groups. The research provides essential information to promote sustainable development in the mining sector and ensure gender equality within it.

This research contributes to the existing body of knowledge on the roles of gender in the mining industry. Previous studies have primarily focused on issues related to women in this field (Abrahamsson & Johansson, 2021; Camey et al., n.d.; Lahiri-Dutt & Burke, n.d.; Mundoli, 2013; Ringblom & Johansson, 2020; Women in Mining Towards Gender Equality, 2021). However, this research expands the scope to study both men and women and also examines the perspectives and awareness of the younger generation regarding gender equality in mining. By doing so, this study offers a comprehensive view of the subject and sheds light on the multifaceted nature of gender roles in the mining industry.

The research seeks to make practical contributions by designing appropriate intervention programs to develop the mining industry based on gender equality, ultimately benefiting communities and society. Moreover, the study expands our understanding of gender roles in the mining sector and their impacts on communities and society.

We next review the animosity literature to develop our conceptual model. We then provide our research methodology, followed by the results of our survey. We conclude by discussing the implications, limitations, and future research directions of our work.

2. Conceptual background and conceptual framework

Gender equality refers to equal opportunities and conditions for women and men to unleash their potential, exercise human rights, and participate in the process of social development. Gender mainstreaming is a method aimed at promoting gender equality and the rights of women and girls in the industrial mining environment. Although policies and regulations in Vietnam affirm equal rights and non-discrimination towards women, the reality shows that women participating in the mining sector still face numerous difficulties. There is gender discrimination in occupational segregation and access to resources and information, which impacts the participation and contributions of women in the mining industry.

However, previous studies on gender equality in the mining sector in Vietnam have been incomplete and lacking information about the different impacts on men and women (EITI International Secretariat, n.d.; Why Extractive Industry Gender Advocates Should Ask For Contract Transparency | Natural Resource Governance Institute, n.d.; Women in Artisanal and Small-Scale Mining: Challenges and Opportunities for Greater Participation, 2014; Fernandez-Stark et al., 2019; Hicks, 2011). Therefore, research on gender equality in mining activities is necessary to gain a better understanding of the roles and impacts of the industry on both genders. From there, appropriate policies and measures can be formulated to promote gender equality and ensure the rights of both men and women in the development of the mining sector in Vietnam.

The research and enhanced awareness of gender equality in mineral exploitation in Vietnam are crucial to guarantee equal rights and fair treatment for women and men. This requires the promotion of policies and regulations that support gender equality, as well as the strengthening of awareness and a shift in community perspectives regarding the roles and contributions of women in the mining sector.

3. Research methodology

3.1. Measures and questionnaire development

The research will employ an approach and construct a toolkit based on Oxfam's Impact Assessment Guidance for Extractive Industries and the Women's Economic and Social Rights Framework of the CEDAW Convention.

The questionnaires are categorized into four dimensions:

1. Work division
2. Employment opportunities
3. Wage level
4. Decision-making

To suit the target audience, the research team conducted four focus group discussions (with eight participants in each group) with students to adjust the questionnaire accordingly.

After obtaining survey results, the study conducted ten in-depth interviews: three with gender experts and seven with professionals working in the mining sector, including three lecturers teaching in the field of mining, to address gender equality issues in the mining industry.

3.2. Sample and data collection

The research conducted a survey and collected data from 207 students currently studying in the education organizations of mining and geology in Vietnam. They are those who understand about mining and expected to work in the mining industry later. Responses included 95 males, 108 females, and 4 individuals identifying with other genders.

Data processing with the questionnaire information was collected online through Google Form and analyzed using SPSS software.

4. Results

Labor Division: When asked about the roles of women in the mining industry, in the survey, 140 students (68%) stated that women mainly perform administrative and office work; 102 students (49.5%) chose women for cleaning and cooking tasks in the mine; 96 students (46.6%) opted for women working in service business areas. 90 students (43.7%) agreed that women could take up specialized technical jobs such as engineers and experts. Only 18 students (8.7%) selected women for jobs like drilling, mining, and rock blasting.

Similarly, in group discussions and in-depth interviews, both students and experts agree that labor allocation depends on the nature of mining. Additionally, some experts believe that many women are hired in mines to retain male employees, as the mining life is tough and unstable, leading some men to quit and return to their hometowns. If an employee has an accident at work, the company will recruit his wife to work in the mine, if she is willing to, as a form of compensation.

Women can work as engineers and in open-pit mining areas, but they are not recruited for underground mining. In some regions, such as Ha Giang province, job advertisements explicitly state that they only hire men, excluding women. Even in cases where women are already working in a plant and want to transfer to positions related to machinery, human resources, or leadership, they are not allowed.

Based on survey results, group discussions, and in-depth interviews, the participants believe that the gender disparity in labor participation in the mining industry is influenced by societal beliefs, biological differences between men and women, and policies. The mining industry is perceived as demanding, hazardous, physically taxing, and potentially affecting women's reproductive health. Superstitions also lead to the belief that women bring bad luck, so they are discouraged from working underground. Social beliefs dictate that accounting and bookkeeping jobs, requiring meticulousness and attention, are more suitable for women, while specialized and physically demanding jobs are suited for men. Women also lack confidence and physical strength for technical jobs, so they avoid applying for such positions.

"Women are often involved in jobs like nursing, accounting, healthcare, and cleaning, while men are mostly in charge of mining operations, drilling, and driving heavy machinery. In Vietnam, it's uncommon for women to drive heavy machinery like trucks or excavators. Gender-based labor allocation in society

tends to direct women to lighter, office-related jobs, resulting in fewer women choosing to become engineers or participating in innovative work”, explains an expert.

“In fact, in the current mining enterprises, the employment positions for women are relatively suitable. It takes into account gender-specific characteristics that may influence work quality and working conditions for the health of the workers”, explains other expert.

Job opportunities: Regarding job opportunities, nearly half of the responses (41%) believe that mining increases job opportunities for women. In contrast, only 27.7% of students think that mining adds to the workload for women.

Interviews with students and mining experts also agree that prioritizing local labor has helped both local people and women in the mining areas to have more job opportunities and increase their income. However, some experts argue that the inconsistent implementation of local labor prioritization results from a lack of specialized training. Local people often do manual labor or establish food services or accommodations for miners. In many places, due to poor labor safety conditions leading to frequent workplace accidents, many companies avoid recruiting locals, leading to more migration of male workers to other areas, leaving more workloads on women and the elderly. This trend also affects the care and education of children.

Wages level: The average income between male and female labor in the mining sector is the same, 65 students agreed, while 46 students disagreed. Some argue that men in the mining industry work more and engage in more physically demanding and technically complex tasks, which may lead to higher income. However, the difference in income is due to the value placed on men's tasks, higher wages for specific jobs, and formal positions rather than wage discrimination between genders. If men and women hold the same position, they would have the same income.

An expert added: “Typically, there is no difference in income and benefits if a woman works at a company with foreign investment or a state-owned company; they will enjoy the same policies as men, including all allowances. However, if the payment is based on productivity, the better physical health of men may lead to higher earnings for them”.

Decision-making: Overall, the decision-making process in the mining industry involves male participation more frequently than female participation in environmental impact assessment meetings. Two main reasons were given for this choice. Firstly, 63 students thought that representatives should attend, so the head of the household would go (among them, 36 students chose the head of the household to be male, and 8 chose female). Secondly, 50 students cited that those with better understanding of relocation and compensation matters should participate (among them, 20 students believed that males had better understanding, and 11 believed that females had better understanding).

However, this result contrasts with the agreement of 69 students who believe that women should be the ones participating in community meetings to represent the family, while 42 students disagree. Experts explain that the level of participation depends on the content of the meetings. Women often attend meetings where they have no significant contributions, while men attend meetings involving issues outside the community, such as work-

ing in remote areas. In many cases, women are more knowledgeable about the actual situation in the local area.

“Who gets interviewed and how it is structured depends on the perspectives and capabilities of the interviewer, team, or interview panel. If the local officials do not enforce strict criteria, situations may arise where they specifically call the household head for the interview, and that household head may be a male. However, if they only require one representative per family, then sometimes women also have the opportunity to participate. I must admit that at the local level, women, especially those who stay at home, understand the impact of mining activities on the environment and their family's life the most. For instance, if they are responsible for cleaning the house every day, they know how the mining activities create dust and affect their home. In contrast, men may not be aware, or they might be the ones who go to the market, knowing that prices are high in the area due to mining activities development, as more people come, and demand increases, will enlarge the prices”, explains the expert.

5. Discussion and conclusion

5.1. Discussion

- There is a need for additional evidence to demonstrate gender issues in mining, particularly the impacts and effects on the communities living and affected in the mining areas at each stage/phase of the mining chain.
- Gender should be considered a matter to be integrated into the Mineral Law, Environmental Protection Law, Tax Law, fees, charges, and related documents, especially integrating gender into the process of conducting environmental impact assessments, compensations for land clearance, and community monitoring to promote women's participation in labor and decision-making rights.
- Awareness among experts need to be enhanced for drafting the Mineral Law, Environmental Protection Law, Tax Law, fees, charges, and related documents about gender in the mining industry, including knowledge about gender/equality, differences in labor, wages, decision-making rights, social prejudices, etc., affecting the labor force and long-term economic prospects.
- It is essential to strengthen the presence of the mining industry in the media, showcasing the contributions and relevance of mining to people's lives, the employment opportunities it offers to all genders, and especially encouraging young women to pursue careers in mining.
- Students, lecturers, and mining experts need to increase their awareness of gender in the mining industry through various approaches, such as extracurricular activities, seminars, media materials, artistic performances, etc. For example, in mining schools, gender-related topics can be integrated into lectures and research projects to allow students to observe the realities, write essays on ongoing situations, and analyze their impacts.

5.2. Conclusion

Gender equality is the Goal 5 among the 17 goals of sustainable development by the United Nations. It is essential to integrate gender knowledge into specialized fields, particularly mining, through various forms, such as lectures, practical internships, extracurricular activities, training programs, etc. For experts solely working in the mining industry, they may lack aware-

ness about gender issues (gender insensitivity). Hence, training sessions, workshops, and exchanges should be conducted to provide mining experts with a gender lens in their activities.

Enduring gender stereotypes are one of the barriers leading to the lack of female participation in the mining industry, especially in technical, specialized, and leadership positions. Therefore, media support, counseling in enrollment, career guidance, etc., are required to promote the participation of young women in mining, by showing them the opportunities, career prospects, labor protection policies, etc., in the mining sector.

Regarding policies: The current policies are gender-neutral, indirectly excluding the participation of women while also not ensuring the safety of men when assuming that hazardous and toxic tasks are designated for men. Hence, policies should focus on enhancing measures for labor protection and safety in the mining industry, aiming at the use of tools and equipment to replace human involvement.

Environmental impact assessments should incorporate gender perspectives to recognize the profound effects of mining on women.

As an exploratory study, this research has some limitations:
i) Initiative and suggestive research on Gender in Mining from the perspective of young people and experts.

(ii) The study was only conducted on a small sample size (207 students in Hanoi); therefore, the study cannot guarantee representativeness of all students or young people.

(iii) The study only focuses on phase 1 of the mining value chain. As a result, the research content only addresses issues related to the impact of mining, division of labor, participation in the mining industry, claim process, and environmental impact assessment. It does not delve into later-stage issues such as taxes, fees, monitoring of activities, or compensation/return, etc.

(iv) The study was conducted during the Lunar New Year, when the response to the online data collection was not a priority.

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Literatura – References

1. Abrahamsson, L., & Johansson, J. (2021). Can new technology challenge macho-masculinities? The case of the mining industry. *Mineral Economics*, 34(2), 263–275. <https://doi.org/10.1007/s13563-020-00221-8>
2. Camey, I. C., Sabater, L., Owren, C., Boyer, A. E., & Wen, J. (n.d.). Gender-based violence and environment linkages: the violence of inequality. <https://twitter.com/IUCN/>
3. Eftimie, A., Heller, K., & Strongman, J. (2009). *Extractive Industries and Development Series #8 Gender Dimensions of the Extractive Industries: Mining for Equity*.
4. Fernandez-Stark, K., Couto, V., & Bamber, P. (2019). *Industry 4.0 in Developing Countries: The Mine of the Future and the Role of Women*.
5. Hicks, J. (2011). Strengthening women's participation in local governance: Lessons and strategies. *Community Development Journal*, 46(SUPPL. 1). <https://doi.org/10.1093/cdj/bsq048>
6. Johansson, M., & Ringblom, L. (2017). The Business Case of Gender Equality in Swedish Forestry and Mining - Restricting or Enabling Organizational Change. *Gender, Work and Organization*, 24(6), 628–642. <https://doi.org/10.1111/gwao.12187>
7. Khoáng sản – Phát triển – Môi trường: Đối chiếu giữa lý thuyết và thực tiễn | Trung tâm Con người và Thiên nhiên. (n.d.). Retrieved July 14, 2023, from <https://nature.org.vn/vn/2013/05/khoang-san-phat-trien-moi-truong-doi-chieu-giua-ly-thuyet-va-thuc-tien/>
8. Lahiri-Dutt, K., & Burke, G. (n.d.). 2. Gender Mainstreaming in Asian Mining: A Development Perspective 1.
9. Mundoli, S. (2013). Gender equality and extractive industry in the Lower Mekong region. <https://doi.org/10.13140/2.1.3743.0406>
10. Nguyen, N., Boruff, B., & Tonts, M. (2018). Fool's gold: Understanding social, economic and environmental impacts from gold mining in Quang Nam province, Vietnam. *Sustainability (Switzerland)*, 10(5). <https://doi.org/10.3390/su10051355>
11. Nguyen, T. K. T. (2020). Studying factors affecting environmental accounting implementation in mining enterprises in Vietnam. *Journal of Asian Finance, Economics and Business*, 7(5), 131–144. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO5.131>
12. Ringblom, L., & Johansson, M. (2020). Who needs to be “more equal” and why? Doing gender equality in male-dominated industries. *Equality, Diversity and Inclusion*, 39(4), 337–353. <https://doi.org/10.1108/EDI-01-2019-0042>
13. Why Extractive Industry Gender Advocates Should Ask For Contract Transparency | Natural Resource Governance Institute. (n.d.). Retrieved July 14, 2023, from <https://resourcegovernance.org/blog/why-extractive-industry-gender-advocates-should-ask-contract-transparency>
14. Women, business and the law 2020. (2020). World Bank Group.
15. Women in mining Towards gender equality. (2021). www.ilo.org/publns.