

Solutions to Narrowing Gender Inequalities in the Mining Sector of Ethiopia

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Abstract: Ethiopia is Africa's oldest independent country and its second largest in terms of population. However, academic literature about Ethiopia is still limited in Asian countries, including Vietnam. Most papers and reports about Ethiopia and Africa are crafted by international development agencies. This paper identifies gender issues in the mining sector of Ethiopia with the use of secondary data and life experience (the author visited Ethiopia in 2019 and did gender analysis and training on gender). The paper emphasizes that the links between gender equality and women's empowerment and the mineral sector development are increasingly recognized in Ethiopia. Although the Government of Ethiopia has put a lot of effort in promoting gender equality in the mining sector, different gender issues still exist which hampers the sustainable development of this industry. The paper, on the one hand, contributes to the enrichment of academic literature about Africa. On the other hand, the paper suggests a solution to mainstream gender in public policy to make it gender responsive, to better satisfy the needs and expectations of workers in the mining sector. In addition, the author aims to share with scholars in Vietnam about gender equality and sustainable development in Ethiopia - a beautiful African country, but one which has rarely been academically written about.

Keywords: Ethiopia; Gender issues; The mining sector; Ministry of Mines and Petroleum (MoMP); Sustainable development.

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1. Introduction

Ethiopia is a landlocked country, located in the Horn of Africa. The country covers a land area of about 1.14 million km² with a population of over 119 million people - the second most populous nation of Africa, after Nigeria. Ethiopia is among the 40 countries in UNDP's low human development index (HDI value below 0.500). The country is the fastest growing economy in Africa, and has sustained relatively strong progress in the last 20 years.

Ethiopia is a country endowed with natural and mineral resources. Mining operations include state-owned cooperation companies, private companies and Artisanal and Small-Scale Minerals (ASM) miners. Artisanal mining (AM) is also the focus area of the Growth Transformation Plan (GTP), which states that women are encouraged and specifically supported to participate in and accordingly benefit from the mining sector (GoE, 2016). Despite its long history in Ethiopia (the history of mining development in Ethiopia takes us to 9th B.C during the reign of Queen Sheba). Mining is one of the least developed sectors with its potential is vast and untapped. Main minerals in Ethiopia include, but not limited to gold, tantalum, gemstones (diamonds and sapphires), oil and gas exploration, potash, and other multiple minerals, such as soda ash, kaolin, quartz, feldspar, and silica sand.

Women's unemployment has been an issue of concern in Ethiopia. Women are nearly three times more unemployed than men. It has been noted that, women's gross national income per capita stands at US\$1,161 compared with US\$1,886 for men (UNDP, 2018). This makes women vulnerable in the field of employment and difficult to protect their basic labour rights. There are different long-standing barriers that hamper the progress of gender equality and women's empowerment, including inter alia gender-based violence, female genital mutilation (FGM), early marriage, and a burden of unpaid care work.

Women play a critical role in the mining sector of Ethiopia. Although men's engagement in the mining sector is three times more than women's averagely, in some areas like Benishangul-Gumuz and Tigray, the participation of women is high, at 68 and 42 percent respectively (UN Women, 2014). In terms of ASM, though there are no official statistics gathered in the sector, women are an essential part of artisanal mining, taking on different roles including digging, panning, processing, transporting, hauling, cooking and cleaning. Their earnings from this informal mining economy become major contribution to household income.

Gender inequality can be seen in the mining sector. Women's engagement in the mining sector, is often concentrated around low-paying job and low value activities with difficult working conditions, and their role is often limited and less profitable than that of men as owners, managers and sellers. ILO report (ILO, 2021) has identified different challenges for women in the mining sector. Even if women have been able to obtain paid jobs in mining, some of them have experienced sexual harassment or other types of gender-based violence in the workplace or at home due to a shift in gender roles and power structures. Apart from that, women in mining communities are frequently excluded from formal community consultations. The report points out that women face different challenges in mining, such as gender-based violence, a lack of childcare facilities, a lack of appropriate bathroom facilities, and poor labour protection. The report also calls for comprehensive solutions to address challenges for female workers in the mining sector, and for the ratification and adoption of international labour standards related to discrimination, equal remuneration, workers with family responsibilities, maternity protection, occupational health and safety, human resources development, gender-based violence, and better social protection.

Different factors causing gender inequality in the mining sector of Ethiopia. For Dupuy (2008), it was the variation in gender norms, and the historical development of a gendered perspective in the country. While Pham and Getachew (2019) indicate that, gender blind and gender-neutral mining law and policy have been identified as major obstacles to achieving de facto gender equality in the Ethiopian ASM. As indicated by MoMP (2020), in Ethiopia, only few women are involved in field work in surveying, exploration, community development activities and others. This has its own negative influence on women to have less interest to get involved in these activities. The fact that women are not trained in adequate number in fields such as geology, other engineering fields and other related fields of studies have limited the number of women professional in the mining sector. Consequently, few female workers are placed in decision making positions. These in turn imply lack of role model that influences female student enrolments in sciences related to earth science. This could be among others ascribed factors to lack of efficient gendered organizational performance management system.

This paper aims to uncover gender issues in the mining sector of Ethiopia - an African country that has rarely been academically written about, and propose solutions to solve those identified gender issues to promote gender equality and sustainable development in the country's mining sector. For that purpose, the following research questions will be answered: (1) What is the situation of the mining sector of Ethiopia? (2) What is the legal framework for gender equality in the mining sector of Ethiopia? (3) What are gender issues in the mining sector of Ethiopia? and (4) What is the best solution for Ethiopia to solve gender inequality in the mining sector of Ethiopia? The paper uses secondary data and the author's experience working on development projects with Ethiopia's Ministry of Mines and Petroleum (MoMP) in recent years.

2. The mining sector of Ethiopia and efforts to achieve gender equality

The mining sector of Ethiopia has become an important contributor to the transformation of Ethiopia from an agriculture-led economy to an industrial one. Ethiopia has put in considerable effort to develop the mining sector into a leading industrial sector of the country. Years ago, it was stated by the Ministry of Mines and Energy (2009) that the vision for the next 15 to 20 years (meaning 2025-2030) for the mineral sector was to establish a diversified and world-class, competitive and environmentally friendly private mining industry, contributing not less than 10% of the GDP, enhancing the promotion of socio-economic development, and pushing up poverty eradication in Ethiopia.

Ethiopia's mining sector is one of the major pillars of Ethiopia's Growth and Transformation Plans (GTP II), the objective of which is to eradicate poverty and achieve the status of a middle-income country by 2025. It was indicated that the mining sector can be the backbone of industrial development by 2020-2023. The Government of Ethiopia (GoE) expects that the mining sector will make an increased contribution to the country's GDP, up from 1.5 percent at present to 10 percent by 2025 (GoE, 2016).

In addition to this, the GoE has put in place multiple measures to advance gender equality and women's empowerment, most of which are grounded in the Constitution of Ethiopia (1995), which ensures equal rights of women and men in all spheres and promotes affirmative action. It has been emphasized in the Constitution that everyone has the inviolable and inalienable right to life (art. 14). Everyone has the right to have their human dignity, reputation and honor respected, the right to develop, and the right to be recognized as a person in all circumstances (art. 24). Everyone has the right to equality and the law shall guarantee to all persons equal and effective protection without discrimination on the basis of race, color, sex, and language, etc.

Promotion of gender equality and empowerment is a key pillar of The Ethiopian Growth and Transformation Plan II (GTP II), with specific emphasis on supporting equity in participation and distribution of development benefits. The GoE aspires to more broadly incorporate gender within indicators, implementation plans and monitoring and evaluation across all GTP II pillars. The GTP II further recognizes that achievement of middle-income status by 2025 necessitates environmental protection, with an additional pillar focused on building a “climate resilient, green economy”, which has additional significance to the fulfilment of gender equality goals.

In support of this, Directorates of Women and Youth Affairs (WYADs) have been established in both the Ministry of Mines and Petroleum (MoMP) and the Geological Survey of Ethiopia (GSE), and mandated to support inclusion of gender concerns and opportunities for gender equality within multiple processes related to: policy and legal reforms, planning, implementation, budgeting and monitoring and evaluation (M&E) within their respective institutions; building institutional gender competence through training of MoMP and GSE; and development/dissemination of guidelines and strategies.

For a country striving to transition from absolute poverty to a level of affluence through a structural transition process, harnessing natural resources including minerals and petroleum is an important milestone. To accomplish Ethiopia’s vision of becoming a middle-income country and to build its industrial development capacity through the modernization of agriculture and the manufacturing industry, the country needs to not only properly develop and utilize its natural resources, but also take into account the desires and expectations of people involved in the industry to best satisfy their gender needs.

3. National and regional gender framework for the mining sector development

The Government of Ethiopia (GoE) is signatory to most important international conventions and declarations related to human rights and gender equality.

Ethiopia has ratified different gender-related conventions, including, but not limited to the Convention on the Political Rights of Women (CPRW) in 1953, and the Convention on the Elimination of All Forms in 1995, and the African Charter on Human's and People's Rights in 1998. Besides that, GoE has ratified Agenda 21 - a legally non-binding, voluntarily implemented action plan of the United Nations to enforce sustainable development. The GoE has also ratified Declaration on the Elimination of Violence Against Women Organizations (DEVAW), Millennium Declaration, Maputo Protocol, Solemn Declaration. Most recently, Ethiopia adopted Agenda 2063: The Africa We want, and the African Union Strategy for Gender Equality and Women's Empowerment (GEWE) for 2018-2028.

Along with the GEWE, the African Union has set out a plan to realize Aspiration 6 of the African Union's Agenda 2063 to develop: "An Africa where development is people driven, relying upon the potential offered by people, especially its women and youth and caring for children" and adopted the principles set out in Article 4 of the AU's Constitutive Act: promoting gender equality as well as key continental and global commitments. It is evident that the GEWE 2018-2028 of the African Union (2019) has mapped out all the key provisions for gender equality in global and continental normative frameworks with regards to Agenda 2063 and the Sustainable Development Agenda 2030 of the United Nations (2015). The four pillars set out in the GEWE, especially the second pillar of Dignity, Security and Resilience, is greatly relevant to the context of the mining sector of Ethiopia, and its gender and development dimensions.

Nationally, the gender commitments are supported by the Constitution of Ethiopia (1995). Specifically, it was stated in Article 13 of the Constitution that all fundamental rights are to be interpreted in accordance with the principles of the signed conventions and declarations. Articles 25 and 35

stipulate the right to affirmative action in fighting the prevailing inequalities and calls for equal participation of women in the political, social and economic spheres of life.

The Constitution underpins the National Policy on Women (1993) and its associated instruments, which also encourages equal participation of women and men in different aspects of life and defines institutional mechanisms to support the inclusion of gender regarding public regulations and interventions. There have been additional gender supportive policies, including the health Policy (1994); Education and Training Policy (1994); Development and Social Welfare Policy (1996); Natural Resource and Environmental Policy (1997); and others.

Other supportive legislation has since been developed including: the Family Code (2000), which seeks to rectify gaps in preceding legislation (Family Law, 1969) by increasing the minimum age of marriage to 18 years and affording women a share of assets following divorce after at least 3 years of marriage. The updated Penal Code (2005) criminalizes domestic violence, as well as rape, female genital mutilation, abduction, and early marriage. The Federal Civil Servants' Proclamation No. 515/2007 ensures women's constitutional rights to affirmative action concerning recruitment, promotion, deployment, training and the creation of a violence-free working environment.

In 2015, the GoE adopted the United Nations 2030 Agenda for Sustainable Development. Following the adoption of the 2030 Agenda and the Sustainable Development Goals (SDGs), Ethiopia has proactively integrated and aligned the SDGs with the GTP II, which will last from 2015/16 to 2019/20. Ethiopia also volunteered and participated in the 2017 Voluntary National Review (VNR) of the SDGs, which assessed how the SDGs were mainstreamed into national development plans and implemented. The VNR report emphasized that there exist enabling policy and environment to effectively implement the

SDGs in the country. The SDGs having been integrated with the GTP II, and it has become legally binding for Ethiopia to implement the SDGs. This is truly evidence of the high-level political commitment and national ownership demonstrated by the GoE.

In fact, the SDGs fully reflect the challenges of different areas relating to Artisanal and Small-scale Mining (ASM): poverty eradication, health, job creation, sustainable economic growth, child labor, education, gender, environmental protection, clean water, responsible sourcing, decent work, production, and partnerships. ASM has key relationships with SDG1 (No poverty), SDG2 (Zero hunger), SDG3 (Good health and well-being), SDG5 (Gender equality), SDG6 (Clean water and sanitation), SDG8 (Decent work and economic growth), SDG15 (Life on land), SDG16 (Peace, justice and strong institutions), and SDG17 (Partnerships).

In terms of promoting gender equality and women empowerment, women are highly active in the ASM sector in Ethiopia. Women account for 30-50% of the workforce and in some cases more than 90%. However, despite being economically empowered through ASM, their participation is usually confined to lower-paid roles, and they often face extreme discrimination both in law and due to social norms around land ownership, obtaining bank loans, becoming license holders, and mining in certain roles. Women can also face gender-based violence and are negatively impacted by the lack of sanitation and child-care facilities in and around mining sites. Thus, gender is a prerequisite, not only for sustainable development, but also for the development of ASM and the mining sector.

It should be noted that gender equality has become a priority for the GoE. Ethiopia elected its first female President in October 2018 and ensured a gender-equal cabinet with 50% female members. Currently, in the MoMP, a Gender Equality Working Group (GEWG) has been established composed of

the following relevant directorates: Mineral Licensing and Administration, Legal Affairs, Environment and Community Development, Planning, Monitoring and Evaluation, Artisanal Mining, Human Resources, and Women and Youth Affairs from the GSE, guided by the Women and Youth Affairs Directorate. The GEWG's mandate is to oversee the implementation of a strong coordination mechanism for integrating gender equality in the MoMP and the GSE and to contribute to the development of the mining sector, and the achievement of GTP II objectives with equitable benefits for the Ethiopian people in alignment with SDGs and the Sustainable Development Agenda 2030.

4. Gender issues in the mining sector of Ethiopia

It should be noted that, the mining sector is a gender-sensitive industrial area. Although mining is a male-dominated industry and according to UN Women, 2014, more men are engaged in the mining sector than women with 71 percent and 62 percent respectively). Women and the poorest groups in the community have different roles which are vital to the sector, especially in ASM operations (SDMR, 2018). Research and studies reveal that women's employment in the ASM sector brings considerable benefits to the family, the society, and the economy. As SDMR (2018) acknowledges, income from mining work helps improve the household's well-being, increase women's empowerment, decision-making capability and socio-economic independence, and enhances long-term investment for family members (such as education for children, savings, re-investment in farming activities). Women and the poor can do mining work seasonally before and after the main crops. Women's employment in the mining sector can solve the issue of fragmentation farmland and lack of farmland. Evidently, industrialization generally and the mining sector particularly provides avenues forward into greater gender equality and sustainable development (UNDP, 2018).

According to SDMR (2018), in Africa, women face different challenges in the mining sector. There are misconceptions, gender stereotypes, and negative cultural values around the ability of women and their involvement in the ASM sector. Women can be forbidden from working underground, at night, and in certain roles. This restricts and hampers efforts to increase the number of women in mining.

Earlier, as Hayes and Perks (2012) emphasized, ASM in Africa is informal, dangerous with harmful social and environmental impacts. More seriously, women working in the ASM sector are subject to sexual harassment and sexual abuse. Young women even may even delve in sex work in mining camps to provide an additional source of income; and this comes with increased health risks and exposures to gender-based violence (SDMR, 2018). In the mining sector, gender discrimination is quite common. In addition to that, as Hayes and Perks (2012) emphasized, women in the ASM tend to work at the lower end of the production chain (washing, sorting, or transporting) and they are often excluded from decision-making processes. Prostitution, sexual abuse, and even rape have become social and health problems that negatively impact female workers in the mining sector.

There has been limited participation of professional women in the mining sector. Women are acknowledged to contribute well to the labor-intensive mineral processing work including, but not limited to carrying ore, sluicing, panning, drying, grinding, clay soil mining, sifting gold diggings, washing, sorting, processing and more skilled work, such as sales, marketing, trading, or supply chain management. In addition to that, they also challenge the gender stereotypes that portray mining as being suitable only for men, and their involvement in the mining promotes gender equality and women's progress.

Gender differences also lies in the fact that, women's participation in mining varies by the type of mineral being extracted. For instance, women's engagement

in salt extraction and strong quarrying is nearly non-existent, and their participation in gemstone mining is very minimal. It is worth noting that women appear to be under-represented in most parts of the minerals value chain and very few women are promoted to decision-making and top positions.

In addressing the gender gaps in Artisanal and Small-scale Mining (ASM) in Ethiopia, Pham and Getachew (2019) points out different gender issues, including, but not limited to women's lack of involvement in decision-making positions in ASM groups; unequal women's participation in decision making and access to mining licenses; women's exposure to environmental pollution; women's limited participation in community development activities and skills-development initiatives; and gender stereotypes. Furthermore, limited accountability on gender mainstreaming hinders the effective integration of gender in all areas and all levels of the ASM sector.

Research has revealed different health-related problems faced by women in the ASM sector. Health risks occur due to a lack of hygiene in the mining camps, malnutrition, physical trauma from the hardship of the manual labour, and women can even suffer from miscarriages due to trauma and stress. Small-scale mining communities are also highly vulnerable to dangerous diseases including malaria, tuberculosis, influenza, cholera, yellow fever, and sexually transmitted diseases (STDs). Due to a lack of awareness, there is also a high risk for women to contract HIV/AIDS and other STDs. Women are also exposed to long working hours, contact with fine dust without adequate protection, high risks of accidents, and intense physical exertion. As Abbasi (2018) confirms, mining is hazardous, accompanied by different environmental, health and safety risks to miners. Different hazards in mining, including physical hazards (dust, noise, heat, and ionizing radiation), mechanical hazards (vibration, fires), chemical hazards, psychological hazards, and biological hazards may lead to serious illness or even death.

Family-related problems have also been identified in the mining sector. Family orientation for small-scale mining is key to understand the causes of child labour, especially female child-labour. The work of women and girls has often been perceived as helping the family. In Ethiopia, women are considered to be fully responsible for household tasks such as providing foods, raising children, fetching water, and collecting firewood (Minwuye, 2010). The modern woman in the ASM sector upholds a triple role of a wife, a mother, and a worker, which can be a stressful obligation for her. When women bring their children to mining camps, that may create the possibility of child labour abuse and child sexual abuse. More seriously, family break-up, polygamy, and abandonment due to the highly migratory nature of ASM (Malo, 2012) are other possible risks for women which might lead them to prostitution or other types of gender-based violence.

Another gender issue analyzed in this paper relates to the education and training practices in Ethiopia. Technical and Vocational Education and Training (TVETs) and other training programs which often do not account for gender implications or disproportionately benefit men. The fact is that there is a serious under-representation of female students in scientific fields at the university level, which limits the number of female professionals in the mining sector (Egne, 2015).

Finally, the gender-blind mining policy and legislation can serve to exacerbate gender inequalities, mainly by reinforcing or worsening power imbalances. This is largely because sectoral benefits mainly accrue to those who are already comparatively privileged by way of social status, education and literacy, financial status, mobility, access to information, freedom of agency and participation. Women are typically disadvantaged in comparison to men in all these respects. Even when supportive policies and laws are in place, those mandated to oversee, implement and enforce them may not have the technical

capacity, resources or personal commitment needed to identify and respond to gender issues at local, regional and national levels and/or may not be held accountable for their gender-based performance. In 2019, the MoMP drafted two important policies: The Mineral Resources Development Policy and the Ethiopian Petroleum Operations Policy, which serve the goals of strong industrial development, in order to ensure equitable and sustainable social transformation and sustainable development for the country over the next twenty years. These policies are judged to be consistent with the country's overall goal of becoming a middle-income country.

5. Facilitating gender mainstreaming in Ethiopia's mining sector

As Pham and Getachew (2019) emphasized, in order to promote gender equality and women's empowerment in the ASM and the mining sector, the Ethiopian Ministry of Mines and Petroleum (MoMP) has taken specific actions to bring about gender equality considerations into indicators, implementation plans, and monitoring and evaluation across the ASM sector and the GTP II in general. Among various key interventions, the MoMP pushed up gender capacity building around the legal and policy framework, gender capacity building and understanding among policy makers and parliamentarians of the MoMP as well as promoting the participation of women's groups in reviewing applicable laws and policies. In other words, mainstreaming gender in the mining sector is essential, so that mining sector policy ensures their workers' free, full, equal and equitable participation, and that women in the mining sector are empowered to become agents of change to enhance the social and economic benefits of mining work for all.

Mainstreaming gender in the mining sector policy is a must to make policies respond well to the needs of beneficiaries, to avoid the creation or reinforcement of gender inequalities. In addition to that, gender mainstreaming makes public

interventions more effective and comprehensive, and ensures that inequalities are not perpetuated in the mining sector. Gender mainstreaming in the mining sector policy helps to avoid gender-blind policy practices and can result in better policy making, better functioning institutions and more effective processes. So that, equality between women and men, should be taken into account in all decisions, in each stage of the policy cycle, by stakeholders involved. For that, the Define, Act, Plan, and Check tools (EIGE, 2016) can be applied as a complete mainstreaming cycle.

The Define tool plays the role of the starting point that defines policy needs. In addition, we need to assess how and to what extent the policy is gender relevant and that specific interventions are needed to address gender gaps and disparities in the mining sector. The first step is to collect useful sex-disaggregated data and information to analyze the situation of women and men in the mining sector. Then, following questions need to be addressed: (1) In what ways does the policy affect the daily lives of women and men in general, or specific groups of women and men? (2) Are there any gender differences and/or gaps in the policy areas related to rights, participation and representation, access to and use of resources, values and norms that affect gender-specific behaviour in the mining sector?

The Act tool covers different activities, including, but not limited to gender equality training, gender-sensitive institutional transformation, and gender-awareness raising.

Gender equality training is important to build capacity on how to mainstream gender equality in the mining sector will often be required for all parties involved. Gender equality training provides participants with the knowledge, skills and values to contribute to the effective implementation of gender mainstreaming strategies in the mining sector. Gender-sensitive institutional

transformation is an organizational change that describes how gender mainstreaming is accomplished in a public organization and how existing approaches can be further enhanced. Institutional transformation is only possible if organizational culture is taken into consideration.

Gender awareness raising aims to improve awareness to increase people's sensitivity, understanding and knowledge about gender equality and gender inequality, and their connection to sustainable development. Gender awareness raising is important to mainstream gender into policies, programmes, projects and services to meet different needs of people. To raise gender awareness, target groups of the policy need to be identified. In the Ethiopian mining sector, the target groups are senior officials of MoMP, members of Gender Equality Working Group (GEWG), and policy makers who design mining policy. Gender awareness raising for mining workers and stakeholders should be organized to promote gender sensitive activities and interventions.

The Plan tool refers to the process of planning the implementation of policies or programmes from a gender perspective. It involves the identification of gender policy objectives and the appropriate approaches and interventions to achieve them. Plan specific actions to be taken to achieve the goals and measures established in policy. During this stage, it is important to set up a gender budget. This is a technique used in the planning phase, but also to track on-going programmes and to review past expenditures. It should be noted that, gender budgeting does not create separated budgets for men and women, it ensures that public funds are equally distributed between women and men. It also contributes to greater accountability and transparency on how public funds are used. When planning, it is necessary to establish indicators that allow monitoring of equity objectives - measuring and comparing the effects of the policy or programme on women and men over the time frame of policy implementation.

The Check tool relates to gender monitoring and evaluation. Gender responsive monitoring is essential for gender mainstreaming. Different indicators are needed to set up, such as context indicators, application indicators, process indicators, result or output indicators, and efficiency indicators. Gender sensitive evaluation is important. Questions can be gathered to be gender mainstreaming checklist based on different criteria including relevance, efficiency, effectiveness, impact and sustainability.

Another way is to mainstream gender in the mining sector activities, including, but not limited to mainstreaming gender in the field activities, large scale mining (LSM), Artisanal Mining (AM) and Small-scale Mining (SSM). To enhance sustainable development, mainstreaming gender in the mining sector need to take into account environmental and social impact assessment, and community development. Gender checklists and indicators are established to address gender issues and close the gender gaps.

6. Concluding remarks

Mining is important to Ethiopia. The industry brings wealth and income to the country. However, the mining industry offers more advantages to men than to women. Ethiopia has made considerable efforts to promote gender equality, with the reassurance of different strategies and programs to promote fair and equal participation of women. However, gender inequality still exists in this male-dominated industry. This article, with solutions to mainstreaming gender into public policy and related policies in the mining sector as well as mainstreaming gender into mining activities, aims to create a “mainstream of gender”, promoting gender-sensitive awareness and activities, and thereby contributing to human development and the sustainable development of the mining industry.

Within the changing context of the nation, with different challenged risks such as wars and epidemics, miners, women, children and the poor face many

difficulties. Therefore, more articles and in-depth studies on gender in the mining sector, as well as studies on women in the mining industry by domestic and international scholars are required to provide recommendations, contributing to improving the position and role of workers, especially of women and the poor in this industry. While the mining industry brings about many different economic benefits to nations, especially developing nations, investment in environmental protection, modern machinery and equipment, and human development are essential, and must be taken into account.

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