Promoting Gender Diversity and Inclusion in the Oil, Gas and Mining Extractive Industries

A Women’s Human Rights Report
January 2019
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The Advocates for Human Rights
Minneapolis, Minnesota USA
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The mission of The Advocates for Human Rights is to implement international human rights standards in order to promote civil society and reinforce the rule of law. By involving volunteers in research, education, and advocacy, we build broad constituencies in the United States and select global communities. The Advocates has produced more than 80 reports documenting human rights practices in more than 25 countries, and works with partners overseas and in the United States to restore and protect human rights. The Advocates for Human Rights holds Special Consultative Status with the United Nations.

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Introduction

Research shows that women are highly under-represented in most extractive industries. The U.S. Department of Labor defines a male-dominated sector as one where women constitute less than one-fourth of the total workforce.¹ Extractive industries, such as oil, gas and mining, have traditionally fallen within this definition. In general, women remain underrepresented in these industries across most levels, but especially at senior ones.² According to Catalyst, a non-profit organization that focuses on gender diversity in the workplace, women constituted only 7.9 percent of board positions in the top 500 mining companies in 2016; of those among the top 100 companies, 94 percent of women represented were in non-executive positions.³ In Australia, women made up only 13.3 percent of the oil, gas and mining workforces in 2009 but by 2015, the number had increased slightly to 14.3.⁴ In 2015, women comprised 19.4 percent of the Canadian mining, quarrying, and oil and gas extraction labor force.⁵

Despite these rates, there is great potential to draw upon the increasing numbers of women with the requisite qualifications as more women are graduating with engineering and other technical degrees. For example, women earned only 2 percent of undergraduate engineering degrees conferred in the United States in 1995. Today, women hold around 18 percent of these degrees. As the sector becomes more mechanized and less reliant on heavy manual labor, traditional arguments for a male-dominated sector that relied on stereotypical reasoning are becoming even more obsolete.⁶

Shifting the status quo requires identifying the parties responsible for bringing about change and how they can do it. The first step to ensuring that women have equal opportunities in extractive industries is to ensure that discriminatory laws and sex-based protective legislation are repealed. Governments are not meeting their international legal obligations, nor are they utilizing their full workforce when they ban women from certain jobs and activities. Under international law, governments are also responsible to shift traditional gender norms and to eradicate harmful cultural practices that interfere with a woman’s right to work. Companies in extractive industries are also subject to international norms that address equal opportunity and workforce diversity. Companies are not complying with the international standards for multi-national corporations nor are they getting the best and most diverse workforce they can when they fail to remove barriers that do not support, retain and advance women. As Caroline Kersten of Leverage HR states:

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² The exception to this can be found in artisanal and small-scale mining (ASM), where women are estimated to fill approximately half of these jobs. See Mylene Codere-Proulx, Bonnie Campbell & Issiaka Mande, Int’l Labour Office, International Migrant Workers in the Mining Sector 6 (2016). In addition, women historically filled the labor force of mines in many countries; for example, women comprised 48 percent of the work force in India’s coal mines at the turn of the last century. Skype interview with Kuntala Lahiri-Dutt (Sept. 7, 2018).
⁴ Id.
⁵ Id.
“[Women] are often the minority in the room, and this has impact on confidence, communication, and networking. Second, they are rarely being looked at as a strategic and visionary leader. And the third challenge is dealing with societal expectations, such as: men are the breadwinners and women take on most of family and household tasks. This often leads working women to feel guilty, as they want to be the best in all areas, and of course, that is impossible.”

At the request of the UN Group of Experts on Coal Mining Methane, The Advocates undertook research to investigate female inclusion in traditionally male-dominated, extractive sectors.\(^8\) The Advocates undertook desk research and interviews with experts to understand these issues. This report sets forth its findings in four sections: 1) benefits of women’s participation in these industries; 2) government obligations in terms of legal and social barriers, 3) corporate roles and responsibilities, and 4) considerations for women in the broader and surrounding communities.

This report first sets forth the positive benefits of a diverse workforce including greater female diversity. In addition to a larger pool of talent and workforce supply, studies show greater female participation can promote profitability, boost more accurate and objective thinking, enhance decision-making, and foster greater innovation.\(^9\)

Second, this report examines the international legal obligations of governments to ensure equal employment opportunities for women. Governments are obligated to uphold and protect human rights for all persons, which span a number of economic, social, and cultural rights associated with employment. For example, the principles of equal treatment and non-discrimination are clearly set forth in international law. Yet, governments not only fail to meet these obligations, but many have placed restrictions—and in some cases, blanket prohibitions—on women’s choice of and ability to access employment.

Governments are also required under the Convention on the Elimination of Discrimination against Women (CEDAW) to modify social and cultural patterns of women with a view toward eliminating stereotypes and prejudices against women. Yet, social norms and expectations of traditional gender roles persist in many countries, creating obstacles to women’s full participation in extractive industries. For example, one study found that 20 percent of individuals surveyed in the oil and gas industry, who strongly agreed that gender-based discrimination was present in the industry, identified social expectations and familial responsibilities as hindrances to women’s participation.\(^10\)

\(^1\)Ruth Palombo Weiss, Wanted: Global Women Leadership Pipeline, ASS’N FOR TALENT DEV. (Sept. 9, 2015), https://www.td.org/insights/wanted-global-women-leadership-pipeline (last visited Dec. 18, 2018); Telephone interview with Mining Company Employee (Oct. 4, 2018).

\(^2\)The Advocates for Human Rights would like to thank the following volunteers and interns for their support: Claire Bentley, Dechert LLP; Cynthia Capota; Jenn Cilingin, Dechert LLP; Henry Defriez, Dechert LLP; Carissa Fitzlaff; Heather Flanagan, Fish & Richardson PC.; Susan Grafton, Dechert LLP; Sarah Musgraves; Jayme Partridge, Fish & Richardson PC.; Gregory Reith, Dechert LLP; Albert Tse, Dechert LLP; Suzanne Turner, Dechert LLP; and; Anna Veit-Carter, Soule & Stull, LLC. The Advocates would also like to thank the many individuals who shared their expertise and time through interviews.


Third, international norms and best practice standards require companies to support and include women. This report examines company practices that can create barriers to or support women’s participation. It also explores the various factors that hinder female participation in these industries, including: bias, unsupportive corporate culture, sexism, wage discrimination, fewer promotions, a lack of mentors or female role models, a lack of flexible work arrangements (FWA) and visible support for their usage, insufficient assistance in re-entering the workforce, and infrastructure that does not meet women’s needs. Along those lines, the greater mobility men tend to have is also a key factor. In Papua New Guinea, the international mining industry tended to fill senior positions with men who had greater flexibility to transfer between projects and countries.\(^{11}\)

Fourth, this report provides considerations to the harms posed to communities of extractive sites, and their disparate impact on women. Finally, this report concludes with recommendations to the extractive industry.

Any international approach to female diversity requires governments and companies to take into account that countries have different laws, cultural contexts, industry practices, and expectations. As stated by the Guyana Women Miners Organization, “you realize that every country has its own mechanisms and the reality for women in mining is different in every country.”\(^{12}\) For example, in Colombia, women can own land and work in the mines without legal limitations. But because of the FARC rebels and security issues, not all women have gone to the mines. Instead, they have paid their male counterparts to do the extractive labor for them, and the women do the crushing work.\(^{13}\) Readers should take considerations set forth in this report as general principles that need to be adapted to local context to be truly effective and relevant.

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\(^{11}\) Martha Macintyre, *Modernity, Gender and Mining: Experiences from Papua New Guinea*, in *Gendering the Field: Towards Sustainable Livelihoods for Mining Communities* 24 (Kuntala Lahiri-Dutt ed., 2011).

\(^{12}\) Skype interview with Guyana Women Miners Organization (Aug. 31, 2018).

\(^{13}\) Id.
Benefits of Female Inclusion and Diversity In The Extractives Industry

The business case for greater gender diversity in the extractives industry is compelling. A growing body of research shows that greater female inclusion provides a larger pool to meet the high demand for laborers, higher retention of key talent, increased profitability, better performance, improved safety records, higher standards of government behavior, and benefits to women and the broader community. As a non-profit organization working with women in mining reports, with women there is better “safety, innovation, and . . . creativity.”

Larger Talent Pool for Recruitment
Companies that limit or focus their hiring on men restrict themselves to a smaller talent pool than those companies that seek to ensure gender neutrality or promote greater diversity in hiring decisions and processes. Actively recruiting and retaining women can help meet the demand for what is a limited supply of workers. In recent years, the oil industry eliminated more than 400,000 jobs globally. Many of these laborers have since moved on to other jobs, and it is harder for companies to find replacements. After the shale industry laid off approximately 60 percent of its labor force needed to frack wells, it took one firm several months to completely fill its fracking crews.

On top of the current shortage, reports have highlighted the aging workforce in the oil and gas sectors and the need to replace these employees as they retire, which can be an expensive process. The National Research Council states that “virtually every major technical society across the energy spectrum has conducted workforce studies, and they have expressed concerns about the aging petroleum workforce and the lack of qualified personnel to replace them.”

12Skype interview with Barbara Dischinger, Camila Reed, & Deborah Craig, International Women in Mining (Sept. 10, 2018); see also Zoom interview with Pink Petro (Sept. 14, 2018).
13Id.
14Skype interview with Barbara Dischinger, Camila Reed, & Deborah Craig, International Women in Mining (Sept. 10, 2018); see also Zoom interview with Pink Petro (Sept. 14, 2018).
17Cunningham, Massive Shortage of Workers, supra note 16.
19See Zoom interview with Pink Petro (Sept. 14, 2018); Skype interview with Barbara Dischinger, Camila Reed, & Deborah Craig, International Women in Mining (Sept. 10, 2018).
During the 1980s’ oil bust, corporations shuttered their doors and laid off workers. Consequently, the low job vacancy rates in the industry deterred much of an entire generation of workers from entering the oil and gas industry until 2000. Today, the existing labor force is nearing retirement, setting up the industry for another labor shortage. Between 2015 and 2035, estimates project 585,097 job opportunities to open up due to replacement needs in the oil, gas, and petrochemical sectors.\(^{21}\) This breaks down to hiring approximately 30,000 new employees every year over 20 years to fill positions left vacant by retiring staff.\(^{22}\) As summarized by one reporter, “[t]here are too few experienced professionals to replace retiring workers.”\(^{23}\)

Labor shortages impact productivity and cause delays.\(^{24}\) While drilling has escalated in the Permian Basin in the United States, the labor shortage means 2,400 wells remained untapped as of September 2017.\(^{25}\) Labor shortages also affect profitability. A senior operator at Byrd Oilfield Service estimated a daily loss of U.S. $7,000 because it lacks enough delivery truck drivers.\(^{26}\) Costs of production rise, as employers lure new workers from the short supply with higher salaries, housing allowances, temporary housing arrangements, and signing bonuses.\(^{27}\) In short, increasing labor costs in an economy with low unemployment and a small labor pool affects the bottom line.\(^{28}\)

In the midst of this shortfall of workers, women represent an under-tapped and qualified resource. One study states that women account for only 10 percent of the mining industry’s workforce, but that, in 2010, women accounted for 54 percent of total graduates.\(^{29}\) In the U.S., women hold 30 percent of STEM degrees, but constitute only 14.5 percent of the labor force in oil and gas.\(^{30}\) As summarized by a representative of International Women in Mining, “[i]f you’re excluding half the population from your recruitment process, you’re simply not hiring from the best talent pool available.”\(^{31}\) Hiring more women can help ease labor shortages, expand the talent pool, and enable companies to recruit more locally. They can also feed into senior level positions as older employees retire. Forty percent of women polled in one survey are in their first four years in oil and gas–constituting a potential pool to fill the demand for senior-level positions.\(^{32}\)

\(^{22}\)Id.; see also Nick Cunningham, Oil Industry Faces Huge Worker Shortage, Oil Price (July 10, 2016), https://oilprice.com/Energy/Energy-General/Oil-Industry-Faces-Huge-Worker-Shortage.html [hereinafter Cunningham, Huge Worker Shortage].
\(^{23}\)Cunningham, Huge Worker Shortage, supra note 22.
\(^{26}\)Id.
\(^{27}\)Salzman, supra note 24; Cunningham, Shale Boom, supra note 16; Eaton, supra note 25.
\(^{28}\)Eaton, supra note 25.
\(^{29}\)Women in Mining (Uk) & Pricewaterhousecoopers, Mining for Talent: A Study of Women on Boards in the Mining Industry 17 (Jan. 2013) [hereinafter Mining for Talent 2013].
\(^{31}\)Barbara Dischinger, Intl’ Women in Mining, Powerpoint presentation, (on file with authors).
**Benefits of Female Inclusion and Diversity in the Extractives Industry**

**Greater Profitability**

Equal opportunity and treatment for women boosts the global economy. According to the McKinsey Global Institute, if all countries were to close their gender gaps so that they at least match the fastest-improving country in their region, worldwide GDP would increase by U.S. $12 trillion by 2025.33

Research shows that female inclusion also boosts company profits. In its 2015 report, Diversity Matters, McKinsey found that companies ranking in the top 25 percent for gender diversity are 15 percent more likely to have “financial returns” higher than the national industry medians.34 Studies have found that profit margins are higher and social success is greater for companies with female directors on their boards and women in senior positions.35 In the mining industry, the top 100 companies have more female directors and women on their boards, while the top 100 to 500 mining companies have more women senior executives that companies falling outside the top 500.36

At the senior management level, gender diversity has been shown to improve financial performance. Increased gender diversity in senior management is associated with improvements in sales revenue, customers, market share, return on equity, operating profits, and share price—particularly in developed countries.37 From 2007–2009, the American Chamber of Commerce in France found that companies with greater numbers of women in senior management “outperformed those with no women by 41 percent in terms of return on equity (22 percent vs. 15 percent), and by 56 percent in terms of operating results (17 percent vs. 11 percent).”38

At the board level, the financial benefits of greater female representation are also well-documented. Catalyst found that among a broad range of companies, those with female board members have the highest returns on equity, sales, and invested capital.39 In terms of representation on corporate boards, companies with greater gender representation on boards have shown at least a 53 percent higher return on equity compared to those at the bottom of the rankings.40 Gender diversity on boards shows a stark impact on investment returns depending on the gender constitution. PWC found that “on average, for every £1 invested in [business related to mining], those with all male boards have a loss of 2% on their investment and those with two or more women make a return of 6% on their investment.”41

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35*Mining For Talent 2013, supra note 29, at 11. See also Catalyst, Inc., *The Bottom Line: Corporate Performance and Women’s Representation on Boards* (2007) (showing that having women directors results in companies having higher returns on sales, higher returns on invested capital and higher returns on equity) [hereinafter Catalyst, The Bottom Line].

36*Mining for Talent 2013, supra note 29, at 6. See also Credit Suisse Inst. Research Rep., *The CS Gender 3000: The Reward for Change 25–26* (2016) (“[C]ompanies with 25% female participation [in senior management] had a 22.8% annualized average return over 5 years, those with over 33% had a 25.6% annualized average return and those with more than 50%, a 29.7% annualized average return.”).

37See generally Hunt et al., *Diversity Matters, supra note 34.


40*Putting All Our Minds to Work, supra note 38.

When companies implement supportive policies for women, it impacts retention and costs of recruitment. When employees leave, replacing them with new hires is costly. Employers must cover advertising, recruiters’ fees, travel expenses, sign-on bonuses, and relocation expenses. For example, in the professional or manufacturing sector, the financial expenses of hiring a new staff person can reach more than U.S. $5,000. When there is investment in women, it increases their reasons to stay with the company.

**Better Able to Meet Public and Investor Demand**

Research indicates that greater female representation at the board level also produces better standards of governance behavior that investors, consumers, and clients are beginning to seek. When boards have greater gender diversity and inclusion, they demonstrate greater accountability, increased and improved governance, and improved collaboration. Increased gender diversity on boards also promotes compliance with national and international conventions and regulations, as well as strengthens corporate accountability before the public.

Studies also show that investor confidence rises with gender diversity. Global investors increasingly are requiring companies to be more transparent in showing their efforts to build gender-diverse boards and disclosing gender-related information. For example, IFC’s Performance Standard 2 outlines requirements for non-discrimination and equal opportunity employment for men and women. The U.S Securities and Exchange Commission now requires companies to disclose whether and how the nominating committee “considers diversity in identifying nominees” for directorships. In other fields, clients and consumers are driving the demand for more diversity and equity in their teams. For example, in the legal sector, corporate clients are demanding to know diversity levels on their legal teams by asking who is billing time, who is receiving the billing credit, what proportion are women or people of color, and who is securing the choice opportunities on a case.
Finally, women are key consumers in today’s economy. One estimate places women’s control of global spending at more than U.S. $20 trillion. In the jewelry industry, women “drive demand for more than 90 percent of the world’s jewelry.” The artisanal and small-scale mining industry has approximately 100 million people who work for and are dependent on it. In locations where mines are less regulated or even illegal, however, it can foster human trafficking, labor exploitation, and environmental damage. Women’s perspectives as buyers and consumers are important. Increasingly, consumer women, especially among the younger generation, care about the sourcing of their goods and the impact on people within the supply chain.

**Improved Performance**

Research shows that companies with more women employees and gender-diverse teams have better teamwork, communication, and greater creativity in solving business and technical problems than homogenous work forces. For example, studies show that while men tend to prefer working with other men, women are more likely to use teamwork and cooperative approaches that draw on the skills and resources of a broader network. Well-managed, broadly diverse teams tend to outperform homogenous teams, including on metrics such as fostering greater innovation. And in locations where socio-economic opportunities are limited for women, female workers show strong respect for their jobs.

With more women comes diversity of perspectives. Teams with diverse members process information more carefully and objectively than homogenous teams. They are more inclined to re-examine facts and scrutinize each other’s decisions and behavior. As a result, research indicates that diverse teams are better at making decisions than non-diverse teams. Having different people in the room brings in perspectives to spot new issues. For example, women’s lenses can pick out sensitivities of job descriptions and performance indicators. Multiple sources have highlighted how women can identify the gender bias in job descriptions that would deter females, such as the use of “he” as a pronoun, or terms that connote traditional notions of masculinity, such as the use of “ninja,” “rock star,” and “dominate.”

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53 Id. at 17.
54 Id.
55 Telephone interview with Corporate Executive, Fortune 500 Company (Sept. 7, 2018).
56 BSR, supra note 52, at 6.
57 Skype interview with Gladys Smith, International Women in Mining (Sept. 6, 2018); UNTAPPED RESERVES, supra note 15; PUTTING ALL OUR MINDS TO WORK, supra note 38, at 8.
58 Org. for Econ. Coop. & Dev., BACKGROUND REPORT CONFERENCE ON IMPROVING WOMEN’S ACCESS TO LEADERSHIP 28 (2016).
59 See, e.g., PUTTING ALL OUR MINDS TO WORK, supra note 38, at 8.
60 Skype interview with Gladys Smith, International Women in Mining (Sept. 6, 2018).
62 Rock & Grant, supra note 9.
63 Telephone interview Corporate Executive, Fortune 500 Corporation (Sept. 7, 2018).
Benefits of Female Inclusion and Diversity In The Extractives Industry

Effects of Gender-diverse Boards
Research shows that boards of directors with at least three women demonstrate improved communications, greater adherence to codes of conduct, and better criteria for managing strategy and monitoring its implementation. Boards with more women directors are also more apt to focus on gender diversity, employee satisfaction, and corporate social responsibility. More gender-diverse boards may also impact how members hold each other accountable due to the different ways men versus women arrive onto boards. Men may often come on boards through social networks, in contrast to women who may lack the same level of access to these connections. As a result, women may have fewer reservations to hold colleagues accountable or confront them on performance issues.

Effects of Women in Senior Management
When women are found in senior management, studies show a positive effect on motivation, teamwork, and cooperation. Specifically, companies with three or more women in senior management ranked more highly on a range of organizational metrics, including capability, leadership, external orientation, accountability, motivation, coordination and control, innovation, and work environment, which are positively associated with higher operating margins. In addition to the financial benefits, women in senior management bring top-down positive benefits, including a positive effect on managers of both sexes and as strong role models to motivate female middle managers. Another advantage is diversity of leadership styles because women typically display more forward-looking and consensus-building skills than men.

Better Safety Records
Companies with more women demonstrate better safety records than companies with few or no women. Numerous studies show that female employees are more likely to follow safety protocols, treat equipment responsibly, and operate safely. As a result, women-operated equipment requires less maintenance and repair. For example, a mining expert described how women tend to be more careful drivers than men and take turns more slowly. As a result, during a tire shortage, employers realized it was financially better to employ women drivers, because they would not wear out tires as quickly as men.

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65 The Conference Board of Canada, Women on Boards: Not Just the Right Thing ... but the “Bright” Thing 5, 13 (2002).
66 Walberg, supra note 46.
67 Id.
74 Telephone interview with Academic Expert (Sept. 4, 2018).
Benefits of Female Inclusion and Diversity in the Extractives Industry

Women operators are increasingly in demand not only because their behavior yields better safety outcomes but also fosters a more safety-conscious operating environment. In Queensland, Downer EDI Mining sought an exemption from anti-discrimination laws to advertise for female-only entry-level operators. Among its other goals of promoting a gender inclusive culture, it explained before the Queensland Civil and Administrative Tribunal that men were more likely to take risks and a larger female on-site workforce would cultivate a safer culture.

Yet, experts cautioned against reinforcing gender stereotypes when recognizing women as “safe.” This reflects biases found in research that attribute women’s strong performance to factors such as luck or putting in long hours, instead of their actual skills and capabilities. To one mining expert, praising women as “safe” engenders and narrows their capabilities while overlooking the overall skills they bring and their technical expertise. Safety should not be the only narrative describing women miners; instead, the narrative should be “safer and...” to highlight the full range of skills they bring to the job. Interviewees also cautioned against hiring based on the stereotype that women are more docile and therefore make for safer workers. One expert shared an example where foreign multinational companies sought to hire women for largescale mines in Indonesia, because women were perceived as less reckless than men. She suggested the actual and underlying reason for preferred women hires was because they were seen as docile workers, particularly when coupled with a Southeast Asian body language custom of bowing down and not looking directly at a superior’s face.

Economic Empowerment to Women and Communities

Mining jobs often pay higher wages than other jobs, as well as offering benefits. New financial opportunities opened when women were allowed to work in Colombia’s emerald mining. Mining for gemstones is unpredictable and can overburden miners with debt, as described below. Women who attain managerial positions, however, have potential to earn far greater income than what they were otherwise earning. One Colombian woman who became a security supervisor at a mine tripled her monthly salary that she received in Bogotá. In South Africa, which produces coal, diamond, gold and platinum and where unemployment rates are more than 26 percent, mining provides jobs in an otherwise challenging employment environment. A former hairstylist in Queensland reported that she earns six-figures annually by working...
10.5-hour shifts, five days per week.\textsuperscript{84} In parts of the U.S., where the supply of licensed truck drivers cannot meet the demand, women can make up to U.S. $200,000 per year.\textsuperscript{85} Based on annual wage data, the average pay for careers in oil and gas is almost U.S. $50,000 higher than the U.S. average.\textsuperscript{86} Especially for blue collar workers without college degrees, women, including single mothers, can comfortably support their families on extractive industry wages.\textsuperscript{87} Opening up these economic opportunities to women empowers women to provide for themselves and their families.

The impact of employing women also has repercussions throughout the broader community. When greater income equality is distributed across women and men, poverty diminishes over the generations. For every U.S. $1 a man earns, he invests around 30 cents back into his family. For every U.S. $1 a woman earns, she invests 80 cents into her family.\textsuperscript{88} When women hold assets or gain income, that money is more likely to be spent on their family’s nutrition, medicines, education, and housing. As a result, children are healthier and communities do better. In addition, research indicates companies that include women have heightened social and environmental stewardship. Examples of such benefits range from lower water usage to returning a greater share of the company’s profits to the community through various forms of community engagement.\textsuperscript{89}

\textsuperscript{84}Dibben, Mining Contractor Wins Right to Advertise for Female Truck Drivers Because They Improve a Safety Culture, supra note 76.
\textsuperscript{85}Eaton, Labor Shortage Weighs on Oil Industry Recovery, supra note 25.
\textsuperscript{86}Zoom interview with Pink Petro (Sept. 14, 2018).
\textsuperscript{87}Telephone interview with Academic Expert (Sept. 4, 2018).
\textsuperscript{88}Economic Empowerment, \textsc{Half the Sky Movement}, http://www.halfttheskymovement.org/issues/economic-empowerment.html (last visited Dec. 21, 2018).
\textsuperscript{89}Underdeveloped Resource, supra note 71.
Governments’ Legal Obligations Regarding Women’s Participation

Women continue to experience widespread discrimination and inequality in employment. In most parts of the world, women often: work in undervalued and low-paid jobs; lack access to education, training, and recruitment opportunities; have limited bargaining and decision-making power; and still shoulder responsibility for most unpaid family care work. Governments, however, have international legal obligations to enact laws and policies to promote equal treatment and opportunity for women, on the basis of equality with men, to participate in the economic, social, and civil life of society.\textsuperscript{90} Enacting policies that provide for equal treatment and opportunity can help bring governments toward compliance with international human rights standards.

International law, including CEDAW, International Covenant on Economic, Social and Cultural Rights (“ICESCR”), and the International Labor Organization (“ILO”) Conventions, recognize relevant human rights that affect women’s ability to enjoy the right to work. Both CEDAW and ICESCR guarantee women the same employment rights, opportunities, choices, and benefits as men. Both affirm the existence of a woman’s right to work and set forth a comprehensive set of government obligations to ensure full and effective enjoyment by women of the right.\textsuperscript{91} Governments must abolish laws, regulations, and cultural practices that restrict the types of work in which women can engage, that limit women’s freedom of movement, and that permit gender-based workplace discrimination or harassment. In other words, governments are obligated to ensure women can exercise their right to work on a basis equal to that of men.\textsuperscript{92} Importantly, CEDAW, along with ICESCR and ILO Convention Nos. 100 and 111, mandate the right to equal pay for equal work without distinction, and the guarantee that conditions of work for women must not be inferior to those enjoyed by men.\textsuperscript{93} This includes not just the right to safe and healthy working conditions but also equal opportunity to be promoted based on competence and seniority, and to obtain the education, training, and mentoring necessary to achieve employment and promotion.\textsuperscript{94} ILO Convention No. 156 also encourages governments to make national policies that enable persons with family responsibilities to exercise their right to work without conflict between their employment and family responsibilities.\textsuperscript{95} CEDAW likewise encourages governments to provide social supports, such as childcare and family services, to allow parents to meet both family and work responsibilities.\textsuperscript{96}

\textsuperscript{91}CEDAW, supra note 90, art. 11; ICESCR, supra note 90, art. 6(1).
\textsuperscript{93}CEDAW, supra note 90, art. 11(1)(d), (f); U.N. Committee on the Elimination of Discrimination Against Women, \textit{General Recommendation No. 13: Equal remuneration for work of equal value}, 1989; ICESCR, supra note 90, art. 7(a)(1), (b); International Labour Organization, Equal Remuneration Convention, June 29, 1951, No. 100; International Labour Organization, Discrimination (Employment and Occupation) Convention art 2., June 25, 1958, No. 111 [hereinafter Discrimination (Employment and Occupation) Convention].
\textsuperscript{94}ICESCR, supra note 90, art. 7(b), (c); Discrimination (Employment and Occupation) Convention, supra note 93, art. 3.
\textsuperscript{95}International Labour Organization, Workers with Family Responsibilities Convention art 3(1), June 23, 1981, No. 156 [hereinafter Workers with Family Responsibilities Convention].
\textsuperscript{96}CEDAW, supra note 90, art. 11(2)(c); see also Workers with Family Responsibilities Convention, supra note 95, art. 5(b).
Moreover, the ILO mandates that governments adopt appropriate measures to safeguard pregnant or breastfeeding workers from work conditions that are prejudicial to the health of the mother or child.\(^{97}\) This includes providing maternity leave and medical benefits\(^{98}\) as well as employment protection during pregnancy and maternity leave.\(^{99}\)

Fundamental to women’s right to work on an equal basis with men are the rights to self-determination and equality before the law. The ICESCR and ICCPR state explicitly that all people, both men and women, have the right of self-determination and may pursue, among other things, their own economic development. This right is frequently described as a necessary precondition and means to the realization of all other human rights.\(^{100}\) Article 15 of CEDAW obligates governments to ensure women’s legal autonomy by guaranteeing them equality with men before the law. It also guarantees women equal legal capacity in civil matters, including to enter contracts, to own and deal with property, to access credit and engage in financial matters, and to represent their interests in courts or tribunals.\(^{101}\) It further requires equality in the law relating to freedom of movement and choice of residence.\(^{102}\) Any restriction on a woman’s right to freely move about or to choose the family residence on the same basis as a man’s may prevent her from accessing employment on a basis equal to men, which violates CEDAW Art. 15.\(^{103}\)

### Laws That Discriminate Against Women

Governments are obligated to ensure that laws protect and promote the human rights of all people without distinction. Many discriminatory laws, however, still exist, prohibiting women’s entry and inclusion into these industries. More than 2.7 billion women around the world face legal restrictions in industries from so-called protective legislation, which purports to protect women from dangerous work, but in practice, discriminates based on harmful stereotypes.\(^{104}\) In discussing exclusions from specific jobs, the Committee of Experts on the Application of Conventions and Recommendations stated that “[w]omen should have the right to pursue freely any job or profession and the Committee points out that the exclusions or preferences in respect of a particular job . . . should be determined objectively without reliance on stereotypes and negative prejudices about men’s and women’s roles.”\(^{105}\)

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\(^{97}\)International Labour Organization, Maternity Protection Convention art 3, June 15, 2000, No. 183 [hereinafter Maternity Protection Convention].

\(^{98}\)Id. at art. 4, 6(7); CEDAW, supra note 90, art. 11(2)(b); ICESCR, supra note 90, art. 10(2).

\(^{99}\)Maternity Protection Convention, supra note 97, art. 8.

\(^{100}\)ICESCR, supra note 90, art. 1(1); ICCPR, supra note 90, art. 1; UN Human Rights Committee, General Comment No. 12: Article 1 (Right to Self-determination), The Right to Self-determination of Peoples ¶ 1, Mar. 13, 1984.

\(^{101}\)CEDAW, supra note 90, art. 15(1), (2); UN Committee on the Elimination of Discrimination Against Women, General Recommendation No. 21: Equality in Marriage and Family Relations, ¶¶ 7–8 (1994) (a woman is denied legal autonomy when she cannot enter into a contract, access financial credit or own property) [hereinafter No. 21: Equality in Marriage and Family Relations].

\(^{102}\)CEDAW, supra note 90, art. 15(4).

\(^{103}\)No. 21: Equality in Marriage and Family Relations, supra note 101, art. 8–9.


In some cases, protective legislation that discriminates based on sex can promote gender equality by taking into account women’s reproductive and parental capacities. Article 10(2) of ICESCR states “Special protection should be accorded to mothers during a reasonable period before and after childbirth. During such period working mothers should be accorded paid leave or leave with adequate social security benefits.”CEDAW explicitly requires States Parties to ensure special protection to pregnant women engaged in work that is harmful to them, safeguard functions related to reproduction, and prohibit dismissal based on pregnancy or maternity leave. For example, these measures may include provisions of maternity leave, accommodations for breastfeeding, or limiting exposure to hazards harmful to the fetus or a pregnant/nursing woman.

But in other cases, countries’ laws perpetuate discrimination and harmful stereotypes. Some countries have laws that require women to obey their husbands, restrict a woman’s ability to travel outside her home or country, or distinguish between a woman’s legal capacity to secure a job or pursue a trade and that of a man. For example, Cameroon, which has mineral resources as well as petroleum, has discriminatory civil laws and ordinances. As of 2014, Article 223 of the Civil Code and Article 74 of Ordinance 81/02 of 29 June 1981 permit a husband to object to his wife’s pursuit of a separate trade or profession. Article 7 of the Commercial Code authorizes a husband to put an end to his wife’s economic activity simply by notifying the Registrar of the Commercial Court of his objection. In addition, men may restrict their wives’ freedom of movement.

Protective legislation is not new and its negative impact on women has been well-documented. In line with early reasoning founded on misperceptions about women’s capacities and roles, the International Labour Organization (ILO) adopted two early treaties that prohibited women from specific types of work. ILO Convention No. 45 “Underground Work (Women) Convention” (C. 45) prohibits all females from underground work in any mine. ILO Convention 89 “Night Work (Women) Convention (Revised)” prohibited women from working night hours in “industrial undertakings,” defined to include, inter alia, “mines, quarries, and other works for the extraction of minerals from the earth.”

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106 ICESCR, supra note 90, art 10(2).
107 CEDAW, supra note 90, art. 11(1)(f), 2, 2(d).
109 World Bank Group, supra note 104, at 3.
112 For example, early domestic legislation, including that adopted by England, Switzerland, New Zealand, Austria, the Netherlands, and France in the 19th century, sought to safeguard women’s security, morality, health, and the welfare of the family by banning women from night work. International Labor Conference, Report of the Committee of Experts on the Application of Conventions and Recommendations, ¶ 3 (2001). Yet, such legal measures were based on perceptions of women’s physical strength relative to men, their perceived vulnerabilities, and their traditional role as homemakers. Id. at ¶¶ 3–4.
114 International Labour Organization, Night Work (Women) Convention (Revised) art. 1(a), 2, 3 July 9, 1948, No. 89. Other “industrial undertakings” include: “(b) undertakings in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed, including undertakings engaged in ship-building or in the generation, transformation or transmission of electricity or motive power of any kind; (c) undertakings engaged in building and civil engineering work, including constructional, repair, maintenance, alteration and demolition work.” Id. art. 1.
The ILO and countries have since recognized the discriminatory impact of such prohibitions. C. 45, prohibiting females from underground work in mines, is recognized to be incompatible with principles of non-discrimination and equality of opportunity and treatment. Specifically, occupational and safety health approaches must seek to protect all workers, regardless of sex. In 2005, the European Court of Justice determined that the ban on women in mining, as well as the requirements set forth in C. 45, violates the European Directive’s prohibition of discrimination based on sex for access to jobs. Several states, such as Bulgaria, Kiribati, and Poland, have taken steps to repeal such bans. In 2015, Colombia repealed restrictions on employing women in mines and hazardous or arduous jobs.

Furthermore, when such laws ban women from working in certain jobs with the purported intention of protecting them, it can actually heighten their risks and vulnerabilities. Before Colombia lifted its ban on underground work for women, unemployment compelled many women to work illegally in mines, thus removing them from formal oversight and increasing their vulnerabilities to trafficking and dangerous conditions. Even with the repeal, many women still work as independent laborers with informal working arrangements with owners of the mines. A non-profit worker described how women arrive at verbal agreements with employers to conduct selective mineral mining, and use what other miners have rejected to collect small pieces of gold. With the exception of Colombia, which has policies in place, and Peru, where policies are under development, there are no regulations for this type of mining activity in most countries. In such informal sectors, when miners are injured or become sick, they lack insurance to cover their health care needs.

Nevertheless, despite recognition by international and regional bodies, many states still retain discriminatory laws that ban women from certain professions. Nine states in the former Soviet Union (FSU) retain a remnant of the Soviet-era and continue to ban women from hundreds of jobs, like driving trucks weighing more than 2.5 tons on inter-city trips, extinguishing fires, working on heights of more than 10 meters—including assembly on drilling rigs and towers—and working on ocean-based cranes and drilling rigs. Kazakhstan is the tenth largest coal-producing country and bans women from 287 professions.
Russia is the sixth largest coal-producing country and a top oil and gas producer. Russia protects women against discrimination in the workforce under its Labor Code. Yet, Article 253 of Russia’s Labor Law bans women from 456 professions. Specifically, Russia’s current Labor Code forbids “labor of females on hard, dangerous and/or unhealthy trades as well as working . . . .” The bar includes prohibiting women from certain mining, welding, drilling, butchering, and diving professions, including repair technician on engineering structures; cleaner of pipes, furnaces and gas conduits; gas rescue teams; offshore crane operators; as well as professional categories such as carpentry, plumbing, and transportation. Despite numerous challenges, the law remains on the books today.

Iran is another example where de jure restrictions limit women’s access to employment. Iran has extensive natural resources, ranking first for natural gas reserves and third for oil reserves. Women in Iran face numerous discriminatory laws and regulations that limit their participation in the job market and in traditionally male-dominated industries. The World Economic Forum’s 2015 Global Gender Gap Report ranked Iran 141 out of 145 countries for gender equality. For instance, Iran’s Labor Code prohibits employers from hiring women to “perform dangerous, arduous or harmful work or to carry, manually and without mechanical means, loads heavier than the authorized maximum.” Many of the jobs in traditionally male-dominated industries qualify as such. Iran’s Civil Code dictates that a husband is the head of the household, and gives husbands control over their wives’ economic choices, including her choice of whether or not to work and what types of work to pursue. A man can ban his wife from working if he believes her doing so would be incompatible with the interests of the family. Under Iran’s Passport Law, husbands are also able to control their wives’ ability to obtain a passport, which may prevent women from accessing jobs that require travel abroad. This is particularly restrictive in the oil and gas industry, where travel to other parts of the region or to offshore oil rigs frequently necessitates having a passport. In addition to the aforementioned laws, there are numerous other laws that prevent women from obtaining certain

125 Labor Code of the Russian Federation of 31 December 2001, NATLEX, https://www.ilo.org/dyn/natlex/docs/WEBTEXT/60535/65252/E01RUS01 (last accessed Dec. 20, 2018) translating TRUDOVOI KODEKS ROSSIISKOI FEDERATSI [TK RF] [Labor Code] art. 3 (Russ.) (“Everyone shall have equal opportunities to realize his/her labor rights. No one can be constrained in his/her labor rights and freedoms or get any advantages irrespective of sex, race, color of skin, nationality, language, origins, property, social or position status, age, domicile, religious beliefs, political convictions, affiliation or non-affiliation with public associations as well as other factors not relevant to professional qualities of the employee.”).
126 ADC MEMORIAL, ALL JOBS FOR ALL WOMEN, supra note 123, at 5.
128 A panel from the Committee on the Elimination of Discrimination against Women (CEDAW) reviewed the Labor Code while considering a complaint from a Russian woman who was denied a job working at the helm of a boat. CEDAW found that the Code violated the woman’s rights and the panel recommended that Russia review and amend Article 253. See Russia’s List of Banned Jobs for Women Violated Women’s Rights, Needs Amending—UN Experts, OHCHR (Mar. 15, 2016), https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17226&LangID=E; see also T. Balmforth, Barred from Hundreds of Occupations in Russia, a Few Women Fight Back, RADIO FREE EUROPE RADIO LIBERTY (Apr. 17 2016) https://www.rferl.org/a/russia-womens-occupations-limited-soviet-law/27680005.html.
132 Quiamri Mijani [CIVIL CODE] Tehran 1928, art. 1117 (Iran) (“The husband can prevent his wife from occupations or technical work which is incompatible with the family interests or the dignity of himself or his wife.”).
133 Passport Law of 1973, art. 18 (Iran).
jobs, both directly and indirectly. Although laws protect women from discrimination in the workplace, they do not apply to hiring or promotions. Many jobs specify gender preferences, especially for technical and managerial jobs. Between the period of March 2016 and March 2017, only 14.9 percent of Iranian women were in the workforce—compared to 64.1 percent of men—despite the fact that women comprise over 50 percent of university graduates. A Human Rights Watch report published in 2017 urged the Iranian Government to “immediately adopt comprehensive anti-discrimination laws, eliminate discriminatory provisions in the current legal system, and extend equal protections to women who participate in the job market.”

Despite the international recognition that such laws violate principles of discrimination and equality, states are slow to change their laws. In some of the FSU countries, states have not only retained the Soviet-era prohibitions but taken the additional step of re-organizing them. Kazakhstan did not repeal the list of prohibited jobs for women, which includes mining, metalwork, construction, despite discussions by ministerial and national commissions to amend or revoke the list. As of June 2017, however, the government of Kazakhstan indicated it would revise the list. In the case of Russia, it has failed to repeal or review the list of banned jobs even after it was found to violate principles of equality and non-discrimination by the Committee on the Elimination of Discrimination against Women (CEDAW).

And even when laws are in place to prohibit discrimination against women, how effectively those laws operate depends on implementation. For example, in Peru, a country with a rapidly growing oil industry and large mining industry, laws provide for equality between women and men and prohibit workplace discrimination. Nevertheless, reports show that women’s rates of participation in senior levels of employment are low, they are paid less than their male counterparts on average, and discrimination in the workplace, including termination of pregnant women, is common.

Private companies in the extractives industries can change these laws. For example, the women’s group at the largest copper producer in Chile has been working hard to be heard by government officials on laws that restrict or hinder women’s ability to work in the industry.

135 Id.
137 Id.
138 Uzbekistan, Kyrgyzstan, and Belarus have adapted the list of prohibited jobs by reclassifying them or grouping them in gradations of prohibition levels. ADC MEMORIAL, ALL JOBS FOR ALL WOMEN, supra note 123, at 13–15.
140 Kazakhstan Will Revise the List of Banned Professions for Women, supra note 139.
141 Comm. on the Elimination of Disc. against Women, Views of the Committee on the Elimination of Discrimination against Women under article 7 (3) of the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women (sixty-third session), U.N. Doc. CEDAW/C/63/D/60/2013 (March 21, 2016); see also ADC MEMORIAL, ALL JOBS FOR ALL WOMEN, supra note 123, at 6-8.
143 Skype interview with Gladys Smith, International Women in Mining (Sept. 6, 2018); Skype interview with Ander Arcos, Alonso, Alliance for Responsible Mining (Colombia) (Sept. 14, 2018).
Social and Cultural Patterns of Conduct That Discriminate Against Women

While laws are a first place to begin, achieving gender equality depends on more than elimination of legal barriers to participation. Women’s participation in the workplace is a reflection of the laws, attitudes, and norms about women’s role in society. There is a direct correlation between gender equality in society and gender equality in work. Governments hold an obligation to address gender equality and social norms that discriminate against women. Article 5 of CEDAW states that “States Parties shall take all appropriate measures: (a) To modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes or on stereotyped roles for men and women.”

At times, harmful customs or superstitions may impede women’s access to the workplace. In South America, superstitions held that if a woman neared the mines, the mine would go dry. In this case, it required targeted outreach to educate the men to open the door to women. In Colombia, women were prevented from working in the emerald mines both because of (now-repealed) legal prohibitions and machismo views that women brought misfortune in the mines.

The injection of money and modernization into local communities can lead to social impacts that negatively affect women, such as increasing incidents of domestic violence, trafficking and sexual exploitation, and aggravating gender inequities. Married women who work night shifts with other men or travel for training may encounter resistance and jealousy by spouses. Altered gender roles, where women become the breadwinner, newly independent, or the higher earner, can be difficult for men to accept and aggravate rates of domestic violence.

A case study of Papua New Guinea illustrates how cultural norms, land ownership customs, and industry practices perpetuate de facto barriers that prevent women from seeking employment in the oil and gas industry. As a small country rich in resources, Papua New Guinea has a dual economy where oil, gas and mining account for almost two-thirds of exports, while a majority of the population depends on subsistence farming. The electoral system is weak, allowing resource companies to take a de facto

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145 CEDAW, supra note 90, art. 5.
146 Skype interview with Gladys Smith, International Women in Mining (Sept. 6, 2018).
149 Macintyre, supra note 11, at 30; Joni Parmenter, Experiences of Indigenous Women in the Australian Mining Industry, in Gendering the Field: Towards Sustainable Livelihoods for Mining Communities 78 (Kuntala Lahiri-Dutt ed., 2011).
151 Such cultural norms have resulted in what anthropologists refer to as “big man” culture, in which power is not passed down hereditarily but instead is passed from man to man (and never to a woman) as part of a greater power struggle. This “big man” culture has resulted in a lack of women in positions of power; for instance, fewer than ten women have served in Papua New Guinea’s parliament since independence in 1975. Ridding Papua New Guinea of ‘Big Man’ Culture Will Take Time, Change of Mindsets, Delegate Says, Presenting First Report to Women’s Anti-Discrimination Committee, United Nations (July 22, 2010), https://www.un.org/press/en/2010/wom1815.doc.htm; Grant Wyeth, Big Men, No Women: Politics in Papua New Guinea, Diplomat (Aug. 11, 2017), https://thediplomat.com/2017/08/big-men-no-women-politics-in-papua-new-guinea/.
government role, providing services, jobs, and infrastructure to locals. Cultural norms have created barriers to women assuming roles as decision-makers and have perpetuated the stereotype that women are ineffective leaders.\footnote{Ridding Papua New Guinea of ‘Big Man’ Culture, supra note 151.} Coupled with the country’s land ownership, women face multiple barriers to participation in the oil and gas industry. Ninety-nine percent of land is under customary ownership, which recognizes land rights based on kinship groups, meaning land is owned only by male clan leaders. Pursuant to the Oil and Gas Act, a company must identify the rightful landowning clans in the area where they want to obtain a development license. Once the landowners are identified, representatives of such plans participate in a development forum, where companies commit to provide infrastructure and services to landowners. The Oil and Gas Act also requires that 40 percent of project royalties and equity dividends be paid to the male landowners. Once a development project is established, the companies and government organize meetings and negotiations in the villages, which only men are allowed to attend. Despite their promise to relay women’s concerns to the oil companies, male landowners seldom report back on the meeting discussions. As noted above, women are effectively shut out at all levels from interacting with oil and gas industries. Because of this exclusion, there is little opportunity to learn about, let alone apply for, jobs in the oil and gas industry in the country. These examples, in conjunction with low levels of education in the region, result in significant barriers to women entering into the oil and gas industry.\footnote{Jen Scott et al., World Bank, Extracting Lessons on Gender in the Oil and Gas Sector: A Survey and Analysis of the Gendered Impacts of Onshore Oil and Gas Production in Three Developing Countries 100–05 (2013).}

In addition, barriers to women’s full and equal participation can be found beyond the workplace and in the community and home. Women do more unpaid work—housework and caretaking—than men. McKinsey Global Institute found that women do three times more uncompensated work than men, which hinders women from reaching their full potential.\footnote{McKinsey & Co., Women Matter, supra note 144, at 38.} The proportion of women doing unpaid labor compared to men correlates with both their participation in the workforce and positioning in leadership or management levels.\footnote{Id.} Experts also cite to the “double burden” that many women employees are expected to work between the formal labor sector and unpaid work. In addition to working their regular job, they are often expected to come home and perform housework, agricultural work, or be the primary caretaker of elders or children.\footnote{Id.} As Lahiri-Dutt explains, when women have children, the “gender roles do not change at home.” Social norms often dictate that men can work the night shift and return home to sleep, whereas women work the night shift, come home, and take care of the children.\footnote{Id.}

**Vulnerabilities of Marginalized Populations**

Barriers to women’s participation in these industries are also complicated by intersectional discrimination that brings in factors such as race, ethnicity, or immigrant status. One scholar cited a historical example during the 20th century in Japanese mines. Lower-paid jobs on the surface were assigned to Korean women, while
underground, higher-paying jobs were distributed to Japanese women. Today, these intersectional complexities persist. In India, indigenous persons dominated the lower-ranking jobs. In South Africa, women holding professional mining jobs tend to be white, while women doing unskilled mining work tend to be black. Industries that strive to address female or other diversity must exercise caution to avoid falling into the “double blind” trap, where policies that include a gender dimension fail to address the needs of other diverse populations or policies that address other diversity fail to include factors aimed at female inclusion.

Where large scale mining has negative effects on communities, indigenous women tend to experience them more so than indigenous men. For example, research in Australia indicates that common barriers all women may experience based on their sex are exacerbated for indigenous women when they have more caretaking duties for extended family, may have children at an earlier age, may be coming from difficult socio-economic circumstances, and of course, face an additional barrier of racism. On mining sites in Australia, indigenous women described the displays of unconscious bias levied at them as women minorities, such as heightened scrutiny for performance, provocations directed to them by men, and getting overlooked for promotions in favor of men or non-indigenous women.

Similarly, in the Philippines, aggressive mining activities have had negative impacts on indigenous communities, particularly affecting indigenous women in rural areas. As caregivers, local women may experience difficulty gathering food and water for families as a result of displacement from their ancestral lands caused by deforestation and flattening of mountains conducted to make way for mining activities. As homemakers, they may also experience the effects of social disruptions, such as increased incidents of domestic violence, alcohol and drug addiction, gambling, infidelity, and prostitution. While women in these areas may be accustomed to having their own earnings from agriculture, they may find themselves economically displaced with their land used by mining companies. The health of indigenous peoples may also be impacted by contamination of soils and rivers caused by mining accidents, which poses a reproductive health risk to women, such as spontaneous abortion and malformed infants. In particular, the Diwalwal area has been beset by social and environmental problems since the discovery of gold in the early 1980s. While women account for approximately 60 percent of the entire population in the Diwalwal area and are involved in the local mining industry as tunnel owners, entrepreneurs, workers in mines and processing plants, and providers of goods and services, there are no female officials in the field of local governance. Women assemblies established in preparation for the Diwalwal Direct State Development Project have expressed a number of socio-economic, environmental,
health and education concerns stemming from mining in the community, including inadequate housing built on slopes and ravines, unsafe working conditions of miners, prevalence of drug addiction, lack of local hospitals, and disinterest in education in favor of livelihood and survival.\footnote{\textsuperscript{170}}

In meeting the specific needs of indigenous women, mining companies’ responses at times aggregate all women together. In Australia’s zinc Century Mine, local customs prohibit indigenous women from handling hematite. At the request of local indigenous communities, and with the support of indigenous women, Century Mine developed policies in which women do not touch, come into close contact with, or haul hematite. Where open pits hold vast quantities of hematite, women are relegated to tasks like painting tires or relocated to harder, slower jobs where the ore is being mined. While the mine has made efforts to meet the needs of indigenous women, who appear to support these exclusionary policies, these rules apply to all women, indigenous or not. As a result, non-indigenous women expressed grievances at being subject to policies on customs that do not apply to them.\footnote{\textsuperscript{171}}

The experiences of international migrant female workers working in the mining industry are less-researched.\footnote{\textsuperscript{172}} Yet, the vulnerabilities of migrant female workers in general are well-documented. Migration impacts women and men differently; it may fortify stereotypes that restrict women’s agency, decision-making power, and aggravate vulnerabilities.\footnote{\textsuperscript{173}} Women migrant workers are at risk of labor exploitation and discrimination in employment; they may face restricted access to health and other services, obstacles to accessing justice, and limited ability to collectively organize.\footnote{\textsuperscript{174}} Even in cases where migrant workers can access social services and enjoy social rights, local trade unions do not commonly take into account their needs.\footnote{\textsuperscript{176}}

Women migrants are generally more likely to move for family-related than labor-related motives; in the mining sector, women are more likely to migrate with their husbands and provide services to male mine workers or the local community than work in a foreign mining industry themselves.\footnote{\textsuperscript{176}} Despite being no less skilled than male migrants in OECD countries, women are often relegated to low-status sectors such as domestic and sex industries and are often unable to receive recognition of their skills in sectors where the male workforce is over-represented, such as engineering or mining.\footnote{\textsuperscript{177}} One extractive industry that sees female migration for work is in the small-scale and artisanal mining sector, where women often move to mining areas for periods of time, leaving their children in the care of relatives. In such cases, factors, such as change in diet, stress associated with leaving traditional lands, and breaking of social ties, has been linked to negative impacts on women. In Mashonaland, Zimbabwe, a study of effects of rural economic development on women’s blood pressure revealed notably elevated levels in mining areas in comparison to areas where large scale agriculture and traditional economic activities took place.\footnote{\textsuperscript{178}}

\footnote{\textsuperscript{170}Id. at 5-6.}
\footnote{\textsuperscript{171}Parmenter, supra note 149, at 75.}
\footnote{\textsuperscript{172}Mylene Codere-Proulx, Bonnie Campbell, & Issiaka Maide, Int’l Labour Office, International Migrant Workers in the Mining Sector 12, 16 (2016).}
\footnote{\textsuperscript{173}U.N. Women, Women Migrant Workers’ Human Rights 2 (2016).}
\footnote{\textsuperscript{174}Id. at 5.}
\footnote{\textsuperscript{175}Codere-Proulx et al., supra note 172, at 57.}
\footnote{\textsuperscript{176}Id. at 11.}
\footnote{\textsuperscript{177}Id.}
\footnote{\textsuperscript{178}Jennifer J. Hinton et al., World Bank, Women in Artisanal Mining: Gender Roles and the Road Ahead 12 (2003).}
Companies Roles and Responsibilities on Female Inclusion

The UN sets forth standards for businesses to exercise due diligence to respect human rights in all their operations. The 2011 UN Guiding Principles on Business and Human Rights present how states and corporations can respect and protect human rights, as well as provide access to remedies. The Guiding Principles clarify that they should implement the principles in a non-discriminatory way “with due regard to the different risks that may be faced by women and men.”

All companies, irrespective of “size, sector, location, ownership and structure,” have a responsibility to respect all recognized human rights. The principles clarify that this responsibility is a “global standard of expected conduct” for businesses irrespective of their operational location or states’ implementation of their own human rights obligations. These include the rights enumerated in the various ILO Conventions, ICESCR, and CEDAW related to labor rights, nondiscrimination, health and security of person, food and water safety, cultural rights of indigenous peoples, and the like. Guiding Principle 13 outlines a company’s responsibility to respect human rights and to avoid, through its own activities causing or contributing to adverse human rights impacts and to address such impact when they occur. For example, if a mine pollutes the water source of the surrounding communities so that people don’t have safe water for drinking or agriculture, the company has violated the community’s right to safe water and must take steps to address the violation. Similarly, exposure of mine or rig workers to hazardous working conditions without adequate safety equipment violates the employees’ rights to health and security of person, and remediation and compensation may be required.

To accomplish this, the Guiding Principles provide that companies should undertake, and track on an ongoing basis, human rights due diligence to assess actual and potential human rights impacts of their business. Companies also should have in place policies and processes regarding their responsibility to respect human rights, including a specific process to identify, prevent, mitigate, and address impacts of their operations on human rights. These policies should come from the highest senior executive level and should be publicly communicated, both internally and externally. When a company finds it has caused or contributed to a human rights violation, it should provide for or cooperate in an appropriate remediation process. This includes providing for a grievance process at the operations level for employees and members of affected communities to raise concerns about human rights impacts and to seek remedies.

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180 Id. at 13. The Guiding Principles recognize the “role of business enterprises as specialized organs of society performing specialized functions, required to comply with all applicable laws and to respect human rights.” Id at 1.
182 GUIDING PRINCIPLES, supra note 179, at 14.
183 OHCHR, CORPORATE RESPONSIBILITY, supra note 181, at 13.
184 Id. at 17.
185 GUIDING PRINCIPLES, supra note 179, at 17–18.
186 Id., at 15–16.
187 CORPORATE RESPONSIBILITY, supra note 181, at 26–30.
188 GUIDING PRINCIPLES, supra note 179, at 24–25.
189 CORPORATE RESPONSIBILITY, supra note 181, 67–69.
The Guiding Principles highlight the importance of gender throughout the instrument. They are explicit in their expectation that businesses assess any adverse impacts as a result of their activities, bearing in mind the “different risks that may be faced by women and men.”\footnote{Guiding Principles, supra note 179, at 1.} As summarized by the UN Working Group on Business and Human Rights:

“the commentary to Principle 3 of the UNGPs provides that States should provide appropriate guidance to businesses on “how to consider effectively issues of gender, vulnerability and/or marginalization,”\footnote{Id. at 5.} while Principle 7 underlines that States should provide adequate assistance to business enterprises operating in conflict affected areas “to assess and address the heightened risks of abuses, paying special attention to both gender-based and sexual violence.”\footnote{Id. at 9.} The commentary to Principle 12 of the UNGPs reads: “Depending on circumstances, business enterprises may need to consider additional standards.”\footnote{Id. at 4.}

Corporate investment in effective diversity programs can not only ensure laws are effectively implemented, but also impact retention and morale. When women find there are other women in mining groups, there are role models, a career path, and people who will support them, it increases the reasons for women to stay.\footnote{Telephone interview with Mining Industry Employee (Oct. 4, 2018); Skype interview with Barbara Dischinger, Camila Reed, & Deborah Craig, International Women in Mining (Sept. 10, 2018).} As illustrated by International Women in Mining representatives, “in groups, women have a voice, and it no longer feels lonely to put up a hand.”\footnote{Skype interview with Gladys Smith, International Women in Mining (Sept.6, 2018).} With greater female diversity, women do not feel as isolated.\footnote{Id.}

**Unconscious Bias**

Along the spectrum of women’s participation in the workforce—from recruitment to retention to advancement—corporations have the opportunity to remove barriers and put in place supportive policies. Throughout every stage, attention to unconscious bias is imperative.

Unconscious bias hinders women’s advancement but is challenging to both identify and prevent.\footnote{Unconscious Bias, supra note 179, at 3.} The ILO defines unconscious gender bias as “unintentional and automatic mental associations based on gender, stemming from traditions, norms, values, culture and/or experience.”\footnote{Id. at 3.} Indeed, the ILO found the second most common barrier to women’s leadership in business to be social gender roles.\footnote{Id. at 3.

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191. Id. at 5.
192. Id. at 9.
193. Id. at 4.
194. Telephone interview with Mining Industry Employee (Oct. 4, 2018); Skype interview with Barbara Dischinger, Camila Reed, & Deborah Craig, International Women in Mining (Sept. 10, 2018).
195. Skype interview with Gladys Smith, International Women in Mining (Sept.6, 2018).
196. Id.
198. Id.
199. Id.
Furthermore, working mothers face double bias based on their sex and motherhood. Other colleagues may view working mothers as not as dedicated to their careers. One worker from the oil rigs described how she worked as an operator before having a child. After giving birth, she stated, “I felt that I had to work twice as hard to prove I deserved the job when I got back.” One mining expert affirmed this misperception, observing that some companies do not hire women of a certain age because they think she will get married, have children, and stop working. This stereotype can negatively affect women’s earnings; one study found that when working mothers were recommended for employment, their starting salaries were lower than equally qualified childless women by U.S. $11,000.

**Pre-recruitment**

Despite various initiatives, a lack of female representation in the fields of science, technology, engineering, and mathematics (STEM) persists. Women remain a minority in the STEM fields despite trends that should be propelling more women into the field. In the U.S., for example, women account for approximately 35 percent of undergraduate degrees in STEM subjects, a number that has remained unchanged for the past decade, even though they account for almost 60 percent of college graduates. In some STEM fields—physics, engineering, and computer science in particular—women are earning only 20 percent of undergraduate degrees, and women’s representation in science and engineering declining further at the graduate level and yet again in the transition to the workplace. According to the latest U.S. census, only one in seven women with a degree in STEM actually works in that area, a statistic that holds true for most countries.

Studies suggest that girls are at a disadvantage in STEM as a result of the interaction of multiple factors embedded in both socialization and learning processes. These factors include social, cultural, and gender norms, which influence the way girls and boys are brought up, learn, and interact with parents, family, friends, teachers, and the wider community. These factors shape their identity, beliefs, behavior, and choices, including the idea that STEM are “masculine” topics and that female ability in this field is innately inferior to that of males. Such factors can be broadly categorized into three key areas: (i) aspirations that are molded by social norms and parental expectations; (ii) information failures that

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201 Zoom interview with Pink Petro (Sept. 14, 2018).
203 Correll, supra note 202.
205 Ana Maria Munoz-Boudet, *STEM Fields Still Have a Gender Imbalance. Here’s What We Can Do About It*, WORLD ECON. FORUM (Mar. 16, 2017), https://www.weforum.org/agenda/2017/03/women-are-still-under-represented-in-science-maths-and-engineering/heres-what-we-can-do. At least in developed countries, as many girls as boys are completing secondary level education, and more women graduate from university worldwide than men. Id.
206 Id.
208 Munoz-Boudet, supra note 205.
affect the decision to enter and stay in a STEM field; and (iii) institutional factors that constrain women’s ability to enter a STEM job. Positive change requires holistic and integrated responses to such issues at the individual, family, school, and societal levels, and it demands engagement from stakeholders at each of these levels. For example, at the school level, teaching quality, female STEM teachers for female students, equal expectations of female and male students, gender balanced curricula that take account of girls’ interests, hands-on activities and real-world learning opportunities, non-gender biased methods of assessment, and supportive learning environments and mentorship programs have all been shown to have a positive influence on girls’ interest, confidence, and self-efficacy in STEM subjects.

Initiatives are in place in many countries to encourage women and girls to consider STEM careers. For example, in Ghana, the Soronko Foundation’s Tech Needs Girls program focuses on the importance of mentorship in encouraging girls to lead and innovate in the field of technology and has trained 4,500 girls by matching them with 200 computer scientist and engineer mentors and role models. In the extractive industries, Shell has sought to address the endemic gender imbalance in the United Kingdom with its experimental Girls in Energy program, aimed at girls aged between 14–16, which endeavors to break down common pre-conceived ideas of oil and gas industry jobs by providing participants with real-life experience of working in the energy industry. While such initiatives are a positive first step, their impact on increasing numbers of women in STEM-related industries at the highest levels remains to be seen.

**Recruitment**

Recruitment of all candidates should be based on objective and transparent processes that do not discriminate against women. Companies should scrutinize their processes of recruitment for unconscious bias, beginning with job descriptions. How job descriptions are worded and what they require can underscore stereotypes and perpetuate gender bias. A talent acquisition leader cautioned against the tendency to impose job requirements that are modeled not after the job’s requirements but the person who has held the job and who is likely to have been male. She explained:

“A lot of companies been around for long time, and the leadership are male, because that is who was working when business started. And if you promote from them and within, which is historically how companies do it, then all you do is get the same men getting promoted from within. So you don’t have the women to infuse women at different levels to question the logic as to how they are.”

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210 Munoz-Boudet, supra note 205.
211 UNESCO, CRACKING THE CODE, supra note 209.
212 Id.
215 Skype interview with Ander Arcos, Alonso, Alliance for Responsible Mining (Colombia) (Sept. 14, 2018).
216 ILO, BREAKING BARRIERS, supra note 197, at 6; Telephone interview with Corporate Executive, Fortune 500 Corporation (Sept. 7, 2018).
217 Telephone interview with Corporate Executive, Fortune 500 Corporation (Sept. 7, 2018).
As a result, companies may unintentionally exclude women because they have historically been filled with and promoted men, thus injecting a male dimension into job descriptions. How a job is worded can encourage or discourage women applicants. For example, limiting the list of mandatory job requirements may encourage female candidates, as research shows that women are less likely than men to apply unless they meet all job requirements. As Pink Petro states, the industry should focus beyond simply recruitment, but on messaging a positive employee experience and the benefits their work brings to the world. Additionally, a company needs to be deliberate and recruit women for STEM jobs. As a retired oil company manager stated, a company needs “to get its female engineers and tech people to schools, conferences, and fairs as recruiters to target potential female employees—it shows you care.”

Diversity on selection and hiring panels is important and helps address in-group favoritism. When hiring, people tend to look for someone who is relatable, who they like, who they could have coffee with—which often means that people tend to recruit people like themselves. In addition, unconscious bias and assumptions about a woman’s plans to have children or to place household responsibilities ahead of career are more apt to result in non-diverse hiring when selection or hiring panels themselves are not diverse. Without diversity on hiring panels or in the selection process, companies will risk ending up with the same—more men.

**Quotas**

Some states and private companies use quotas to increase female participation. For example, South Africa introduced quotas to promote female inclusion in the mining industry. In its Broad-Based Socio-Economic Empowerment Charter, it set a 10 percent female participation rate in the mining sector within five years of the 2002 charter. In Chile, the government with the assistance of UNDP has developed a procedure where the government sets the standards in the community fields and establishes the expectation for women to be in the workforce. Many women often see quotas for boards as a positive step. Indeed, quotas can be a potential solution when mandating female inclusion from the lower levels on up to the decision-making level compels companies to onboard.
Some considerations should be taken into account, however, when using quotas. Some women harbor concerns about the potential for tokenism. For example, a talent management and acquisition leader at a global agricultural company explained that mandatory quotas may convey a message that “we are going to lower our standards to hire a woman.”

It is important that the industry recognize that mandatory quotas alone are not sufficient to support women. Quotas can also result in a rote check-the-box approach, where companies aim to meet the numerical goal but little else. One mining non-profit organization noted how women had representation on boards, but their participation was limited to an observer role. It can also provide a false sense of achievement toward gender equality merely by the presence of women, thus stopping other initiatives to undo gender bias and discrimination. Lahiri-Dutt explains further that simply meeting quota hire goals is not enough but requires efforts to support and advance women after they are in the front door. She observed female mining engineers who joined operations departments in mining companies, but later moved laterally to environmental departments or elsewhere. She surmised that women transfer to so-called softer departments because they see their career prospects as limited in operations department where men dominate the decision-making positions.

Imaging, Norms, and Effects on Recruitment
As a mining company employee stated, the mining industry, like the technology industry, is perceived by up and coming college students as a “male industry.” The oil and gas industry likewise is perceived as “requiring long hours, being dirty, and being a man’s job.” The entire extractive industries sector continues to be widely regarded as male-dominated, both in workforce and in industry culture. Gender-biased corporate recruitment and employment policies continue to hinge on outdated gender stereotypes that women are unsuitable for the work. With the increase in technology and automated operations, however, the traditional argument that women lack the physical skill to do the work is not always relevant. Companies thus should examine the images and messaging they convey to the public. New recruits are not only looking at people on-the-ground but in the board room and at senior levels. Research shows a positive correlation between the number of women at the board level and how appealing women find that industry. In contrast, male-dominated senior positions and boards convey a message of male-manager thinking, which may deter potential female candidates. As a retired oil

230Skype interview with non-profit women’s mining organization (Sept. 10, 2018) (citing women who have shared concerns about quotas with them).
231Phone interview with Corporate Executive, Fortune 500 Company (Sept. 7, 2018).
232See Green, supra note 81.
234iLO, BREAKING BARRIERS, supra note 197, at 5.
235Skype interview with Kuntala Lahiri Dutt (Sept. 7, 2018).
236Id.
237Telephone interview with Mining Company Employee (Oct. 4, 2018).
238Telephone interview with retired oil services company manager (Oct. 15, 2018).
239CENTER FOR WOMEN IN POLITICS AND PUBLIC LEADERSHIP, CARLTON UNIVERSITY, THE PATHWAY FORWARD: CREATING GENDER INCLUSIVE LEADERSHIP IN MINING AND RESOURCES 30 (2012).
240iLO, BREAKING BARRIERS, supra note 197, at 5.
A company manager stated, although she was recruited out of engineering school for a job serving oil rigs where she was the only woman on the rig, she saw senior women in the corporate headquarters and she knew those women would have her back.\textsuperscript{241}

Celebrating women’s achievements through diversity messaging is important. With strong female role models, more women may be encouraged to join the industry, thereby increasing the pipeline to management and strengthening the talent pool, while reinforcing the positive role of diversity through the company.\textsuperscript{242} Company photos, quotes, and the people who appear on internet searches are now accessible to and influence would-be applicants.\textsuperscript{243} According to an executive director of a diversity organization, “representation matters, but it has to be meaningful.”\textsuperscript{244} When championing female role models, companies should also include guidance for women to develop their personal brand and connect to professional networks and opportunities. They should also strive to profile diversity within female role models.\textsuperscript{245} Instead of using token stock images to show diversity, the executive director recommends highlighting people who are both diverse and actual champions.\textsuperscript{246} For example, the National Diversity Council highlights the 50 most powerful women in oil and gas each year. Using a set of standards, the council seeks candidates who are top leaders, contributors to business growth or strategic directions, have a record of achievements in areas of expertise, are inspiring role models and mentors to other women, demonstrate integrity and ethical behavior, and have a commitment to corporate citizenship.\textsuperscript{247} A retired oil company manager emphasized that the industry needs to let females know that there are female role models in their companies and that they won’t be the only female on the rig or in the office.\textsuperscript{248} The Guyana Women Miners Organization described their efforts to celebrate the journeys of women in mining to help normalize the concept. They will highlight different women in mining through their bimonthly newspaper feature of women in mining, and in doing so, “start to humanize it and ensure that persons understand that success is not just limited to those going in suits and ties.”\textsuperscript{249} The International Women in Mining’s (IWiM) Photo Competition seeks to create an online photo gallery of women working in mining to provide role models, demonstrate the spectrum of jobs women hold in the sector, illustrate the increased rates of female participation, and help shift the culture of a male-dominated sector.\textsuperscript{250}

A diversity director stressed the importance of authentic and honest representations; to her, when women of color are more candid about the positive and challenging aspects of their work environment, it resonates with other women who are more likely to believe them and believe these women leaders will be supportive of them.\textsuperscript{251}

\textsuperscript{241}Telephone interview with retired oil services company manager (Oct. 15, 2018).
\textsuperscript{243}Telephone interview with Corporate Executive, Fortune 500 Corporation (Sept. 7, 2018).
\textsuperscript{244}Telephone interview with Twin Cities Diversity in Practice, (Sept. 12, 2018).
\textsuperscript{245}PricewaterhouseCoopers, Advancing Women in Mining and Resources in Singapore 20 (June 2016).
\textsuperscript{246}Telephone interview with Twin Cities Diversity in Practice (Sept. 12, 2018).
\textsuperscript{248}Telephone interview with Twin Cities Diversity in Practice (Sept. 12, 2018).
\textsuperscript{249}Skype interview with Guyana Women Miners Organization (Aug. 31, 2018).
\textsuperscript{251}Telephone interview with Twin Cities Diversity in Practice (Sept. 12, 2018).
Diversity Policies
Companies should consider setting their own gender diversity targets for dissemination to educate employees on the benefits of diversity, raise awareness levels, and ensure that diversity is one of the considerations when considering appointments, policies, and strategies. To achieve such targets, companies may consider facilitating a workplace culture that takes into account domestic responsibilities of employees, facilitating training to staff who are from diverse backgrounds, recruiting from a diverse pool of candidates for all positions (including senior management and board appointments), and reviewing succession plans to ensure an appropriate focus on diversity. To further improve effectiveness, such self-imposed regulation should also be coupled with meaningful tracking and accountability in order for the changes needed and the results to be achieved. For instance, companies may consider creating a remuneration and nomination committee on the boards to develop and implement measurable objectives and strategies to execute the diversity policy, as well as monitor and report on progress. Companies may also consider including such measureable objectives in annual performance indicators for senior management. In addition, the remuneration and nomination committee should also conduct board appointment processes in a manner that promotes gender diversity, including establishing a structured approach for identifying a pool of candidates, using external experts where necessary.

Board evaluation reviews
When completed properly, board evaluations can identify areas of strengths and weakness, fostering changes that positively impact performance and shareholder value. They can also provide independent and impartial advice, objectivity and rigor, particularly when those boards are open to external reviews. In particular, such evaluations should be a continuous and ongoing process that meets the needs of the individual company and its circumstances. Evaluations should assess the composition and diversity of the board, and include the assessment of both the committees and individual board members.

Broadening perspectives on educational backgrounds
The assumption that mining-related degrees are necessary for success in the extractive industry is often ill-conceived. Although this is arguably true in the fields of mining, engineering, geophysics, geochemistry, metallurgy, and other technical subjects, a large proportion of people working in the mining industry at all levels do not have a technical background. Non-technical expertise can also be of key importance to management positions, including the following business areas: strategy, legal, business development, investor relations, accounts, marketing, and communications. Generally, competency-based, rather than industry-based, recruitment (which focuses on how well a candidate can execute a role), should comprise a basis for hiring. For boards, recruiting should be conducted outside traditional mining networks on the basis of board criteria and not solely on board and CEO experience within the mining sector.

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252 Mining for Talent 2013, supra note 29, at 22.
254 Mining for Talent 2013, supra note 29, at 22.
255 Diversity Policy, Dragon Mining, supra note 253.
256 Mining for Talent 2013, supra note 29, at 22.
258 Mining for Talent 2013, supra note 29, at 23.
259 Mining for Talent 2015, supra note 242 at 30.
Retention

Inclusive career development programs and networks
Companies should consider implementing development programs and networks that can help women identify a career path in the company early on. Gender inclusive networks that see women gaining equal access to traditionally male-focused networking activities should also be considered, with the aim of reducing the “male networks” from which women may be excluded. In addition, gender responsive mentoring programs can help candidates define their career goals, while being sensitive to the different long term career paths of women.260

A transparent promotion system can clearly communicate to women the necessary steps to progress to the next level. When new to the sector, companies must provide women with information of all possible jobs they could be performing, the required criteria to get those jobs, and the steps they can undertake, with or without the company’s support, to meet these criteria.261

Establishing systems for work-life balance
Establishing systems that promote a work-life balance is important to sectors, where female directors or CEOs may be under-represented. Work-life balance can encourage employee productivity and support employees’ management of their work and home responsibilities. Research shows that women often struggle with work-life balance, creating a barrier for them to achieve higher positions. Studies show that working environments that suit employees’ personal working styles can lead to more energized, motivated, and productive employees. Such programs should be balanced and monitored, however, to ensure it is meeting the needs of the companies.262

Advancement

Performance Evaluations
Companies should scrutinize their performance evaluations for potential bias that favors one sex over the other. Performance indicators may unintentionally reflect masculine traits of leadership or male bias. For example, McKinsey found that whereas men are typically evaluated for their future potential, women are typically scrutinized based on their past achievements.263 One analysis of individual performance reviews found that women were 1.4 times more likely to receive negative and subjective feedback than men.264 Unconscious biases can feed into reviews, modifying the perceptions of how women and men behave in the same situation. For example, women may be seen as stuck in “analysis paralysis” versus a man in the same scenario who is viewed as a careful thinker.265

260Id. at 29.
265Id.
Companies should also evaluate expectations that favor men’s traditional roles and lifestyles over women. The corporate “anytime, anywhere” model places disproportionate burdens on women who labor under the double burden. The expectation that strong performance requires availability and mobility at any time burdens women who already shoulder housework and caretaking. For example, one company used “unfailing availability and total geographical mobility” as a leadership indicator. Yet, “fly in/fly out” formats tend to attract single men or married men with a spouse who can care for the family back home. In effect, it marginalizes women who bear unpaid work responsibilities outside of the workplace. In contexts where women already face inequities, rewards and promotions may go to those employees who benefit from socio-economic or other advantages over women and other minority figures.

**Project Assignments**

Supervisors and senior managers should also evaluate how they allocate highly desired assignments. Women engineers are 20 percent less likely than white men to secure sought-after projects. When coupled with race, their chances diminish further. Female minority engineers are 35 percent less likely than white men to get such assignments. Instead, women are relegated to projects that are more invisible or unlinked to revenue.

Women do not enjoy the same access to highly desired assignments for a number of reasons. Misperceptions and stereotypes about gender roles may influence how managers distribute projects. When supervisors do not know their employees or their staff lack the training or experience, then they may assign projects based on assumptions instead of actual skills. Assigning based on skill sets, however, can help promote women’s inclusion. For example, BHP in its new Brisbane logistics control centre, recruited people based on matched skills instead of mining experience alone. Women now make up 53 percent of that workforce.

Women may also be misperceived as not wanting the high-profile projects even when they do desire them. Stereotypes set expectations that women are “modest, helpful, and communal” and often volunteer for the less desirable and undervalued tasks. At times, employers assign women certain projects based on perceptions that women are better at tasks like organizing or event planning. Doing so creates the expectation that women should accept and thrive with such projects while men’s time is

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266 McKinsey & Co., Women Matter, supra note 144, at 39; see also Telephone interview with retired oil services company manager (Oct. 15, 2018).
269 Macintyre, supra note 11, at 24; Telephone interview with Mining Company Employee (Oct. 4, 2018).
270 LO, Breaking Barriers, supra note 197, at 4.
271 Id.
273 LO, Breaking Barriers, supra note 197, at 4.
275 Williams & Multhaup, For Women and Minorities to Get Ahead, supra note 272.
276 Id.
277 Telephone interview with former oil services company manager (Oct. 15, 2018) (discussing how getting “promoted” to catalogue all available information and converting it to computer was a “girl job,” similar to being a “librarian” that she was selected for because of her perceived attention to detail).
saved for “more remunerative work.” Furthermore, working mothers face an additional barrier when the workplace assumes their commitment has changed and redistributes their work or clients during their maternity leave, leaving women to struggle to recover their work gains made prior to their leave.

Leadership Pipeline
Companies should be aware of obstacles to career advancement for women. Women and men identify different barriers to leadership for women. On the one hand, women see inadequate support and overlooking of female candidates as impeding their path to leadership. On the other hand, men cited the insufficient pool of women candidates and women’s lack of flexibility.

Leadership development programs specifically directed at women are under some debate. Some see that women’s unique barriers require a gender-specific approach. Others argue that women-centered leadership trainings reinforce the concept the female and male leadership are different, overlook the basic traits that good leaders have regardless of sex, and perpetuate the same challenges instead of fostering engagement and learning between women and men. Regardless if the program is gender-specific or -neutral, the ILO found that women and men do not enjoy equal access to leadership development programs. For example, only 27% of men in a North American survey reported never having a substantive interaction with senior leadership, compared to 33 per cent of all women.

Training
Education and skills training are critical to providing women with equal opportunities to participate in the artisanal and small-scale mining sector. Access to quality childhood education is important in breaking intergenerational poverty cycles, delaying marriage and childbearing, and improving employment opportunities later in life. Adult vocational training and life skills development programs are also a component of women’s empowerment. Nevertheless, a significant issue, particularly at the local level, is the absence of appropriate education and training to enable anyone to enter the mining sector. In Malawi, for example, even when women and men earn degrees in relevant fields, the standard of education they receive is not equivalent to the education obtained in a mature mining country. As a result, jobs at new, large-scale mines are filled by expatriates. Gender bias can also create an addition barrier for women; for example, one scholar found that employers in South Africa typically offered training opportunities, as well as employment, only to males.
Because of the hazards inherent in mining jobs, it is important that all employees, including women, have regular access to job-specific skills’ training, such as the correct biomechanics when operating heavy machinery and using heavy and/or vibrating power tools. Because women are generally in subordinate positions, they often lack the access and resources to develop their capacity through education and training.

Further, sexual harassment training should be provided to both men and women on an ongoing basis to inform them about sexual harassment in the workplace, what their rights are, who they should contact, and the consequences. All employees should be informed of the grievance process in the event of sexual harassment. In addition, trainings on all women-related policies and procedures should be organized for all staff during each induction cycle, with specialized training for line management and/or supervisors assigned to investigate grievance cases.

**Mentorships and Sponsorships**

Some companies are rethinking the traditional mentorship scheme in favor of formalized sponsorships. Informal mentorships run the risk of lacking authenticity and commitment to engage beyond short meetings over lunch. As a retired oil company manager explain, informal programs that pair employees who do not work together or know the type of work they do, coupled with infrequent and unplanned meetings, is a recipe for failure. Sponsorships, on the other hand, focus on deepening a relationship between a senior-level employee and a junior associate so the sponsor can advocate and fight for them in terms of projects and promotions. A Fortune 500 company describes how it uses “forced sponsorships” in its environment where men outnumber the women. The first step presents sponsors with the roster of the top women and diverse talent in the company and ask who they know. Importantly, they never force individuals to sponsor any woman but ensure the sponsor knows the junior-level worker before engaging. Where sponsors do not know any sponsorees, the company sets up both individuals on a path to know each other, so they can circle back later to ask for formal sponsorship. To this executive, their sponsorship is about exposure and relationship-building: putting diverse individuals on the sponsor’s radar so the sponsor can get to know the sponsoree, can introduce her to people he or she knows, and eventually put her forward for promotion.

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291IIMMACULATE JAVA & PULUNA SICF, PAPER ON CHALLENGES AND ACHIEVEMENTS ON SMALL SCALE MINING AND GENDER - PAPUA NEW GUINEA, 9 (2010).
293Id.
294Telephone interview with Mining Company Employee (Oct. 4, 2018).
295Telephone interview with retired oil services company manager (Oct. 15, 2018).
296Telephone interview with Twin Cities Diversity in Practice (Sept. 12, 2018); Skype interview with Barbara Dischinger, Camila Reed, & Deborah Craig, International Women in Mining (Sept. 10, 2018).
297Telephone interview with Corporate Executive, Fortune 500 Corporation (Sept. 7, 2018).
Promising Practice: International Women in Mining (“IWiM”) developed a mentoring program for women in resources to help shape the female mining leaders of tomorrow. This international six-month program focuses on goal setting and leadership via a structured approach. It pairs senior mining leaders (men and women) with women working across mining in all fields, professions and seniority levels across the world. The pairing in this case not only stretches the mentee, but the mentor also. IWiM takes special attention to match mentors with women from a different country or continent, different cultures and or work environments, meaning they also learn, and it gives the program an element of reverse mentoring. IWiM also makes sure both mentees and mentors have shared values and will align on a personal level. More information is available at www.iwrmp.com.298

Retention and Supportive Environments

Flexible Working Arrangements

Companies also can provide environments supportive of women by enhancing flexibility. Flexible Working Arrangements (“FWA”) can include a variety of arrangements including staggered working hours, compressed work scheduled, scheduled breaks for extended learning and training, and telecommuting. Companies have deployed a variety of arrangements to meet employees’ needs. For example, one global company has contracted with Milk Stork, a service to enable traveling mothers to pump, package, and ship their breastmilk home to their infants.299

Greater flexibility is related to better engagement and retention of staff of both genders, whereas staff without such flexibility are more inclined to narrow their career goals or look for working conditions that meet their needs elsewhere.300 FWA can also increase safety and production, lower operating costs, as well as draw and retain a more diverse and talented workforce.301 Even if FWA are in place, however, not all staff may feel comfortable using it.302 Factors such as stigma, a lack of clarity on how to use them, or supervisor resistance, can deter employees from availing themselves of workplace flexibility. International Women in Mining highlights the importance of meaningful dialogue to understand what FWA means for everyone, from the people working in the office environment to the labor force on sites, shifts, and with first-in, first-out rosters.303

298Skype interview with Barbara Dischinger, Camila Reed, & Deborah Craig, International Women in Mining (Sept. 10, 2018); see also Skype interview with Gladys Smith, International Women in Mining (Sept. 6, 2018).
299Telephone interview with Corporate Executive, Fortune 500 Company (Sept. 7, 2018); see also Milk Stork, www.milkstork.com.
301Powerpoint, Barbara Dischinger, International Women in Mining (on file with authors); U.N. Women, Status of Women, supra note 281, at 26.
302Telephone interview with former oil services company manager (Oct. 15, 2018) (discussing how in 30 years with the company, she never encountered a man who took paternity leave upon the birth of a child).
303Powerpoint, Barbara Dischinger, International Women in Mining (on file with authors).
Opportunity to Train and Develop

Women employees at all levels need the same opportunity as men to train for additional skill levels and develop leadership opportunities. As one mining expert stated, “in open-pit mines, the hierarchy for pay and prestige are based on the kind of equipment being operated. Everyone starts at haul truck and then, with training, gets to move up to where they are setting the pace and in charge of the crew.” Training requires time off of the job and a person to do the training. If women do not have the same opportunity to train on specific equipment or to develop leadership skills, they cannot advance. As a result, they may leave the job. As one mining expert stated, “to keep employees interested [male and female], you have to create added value for staying with the company and one way to ensure women stay is to provide equal access to training and leadership development opportunities.

Sexual Harassment

Reports of sexual harassment within extractive industries are prevalent. Many of these revolve around the experiences of women miners who often operate underground with men who perpetrate abuse. Miners who work underground often have few sources of light and limited visibility, increasing the risk of sexual harassment. When women are sexually harassed in dimly-lit areas, such as mines, they may not be able to identify their offenders. Glen Mpufane, IndustriALL’s Director of Mining, noted that even when women do know their offender’s identity, they do not report “due to fear of reprisals, intimidation and losing their jobs.”

Additionally, the risk of sexual harassment increases when workers are transported to and from the underground mining sites due to close physical proximity. One female participant in a study of South African mines told researchers that “[i]n the [transport] cage, [men] will push us like this and you can’t even breathe and the man is after you, you can feel his whole body pressing against you. Then they say like ‘what are you doing here at the mine?’; ‘my woman is at home, you are here at the mine.’”

In Chile, the Ministry of Mining conducted a 2016 survey of 603 women. The survey found that 40 percent of women reported hearing “cutting jokes, cat-calling and wolf-whistling,” and that another 20 percent of women reported being groped at work. Further, 7 percent reported receiving proposals to have relations.

304 Telephone interview with Academic Expert (Sept. 4, 2018).
305 Id.; Telephone interview with Corporate Executive, Fortune 500 Company (Sept. 7, 2018).
307 Telephone interview with Mining Company Employee (Oct. 4, 2018); see also Telephone interview with retired oil services company manager (Oct. 15, 2018) (stating that one reason she stayed with the company for 30 years was her ability to train and learn new skills in new areas and to develop her leadership skills).
312
A study of women mineworkers in Tanzania demonstrated sexual harassment in numerous mining industries throughout the country. For example, women miners of volcanic rock reported enduring ongoing threats and demands for sexual favors in order to support their families. One Tanzanian woman in cement-related mining reported that the men she supervised harassed her; their disrespect effectively prevented her from doing her job. The study also looked at multiple instances of sexual harassment in gold mining, but acknowledged efforts to protect women and prevent harassment, such as clarifying and promoting sexual harassment policies, terminating workers who violated those policies, and maintaining a sexual harassment hotline.

Due to the physical nature of mining, sexual harassment may become life-threatening, where it would not in other industries. Former Alaskan gold miner Hanna Hurst told The New York Times that, in addition to making sexual remarks about her and circulating pornographic images, her male coworkers tampered with both her drill and walkie-talkie, which put her at risk of death or injury. Hurst was unable to hear instructions or communicate with coworkers and supervisors, and it prohibited her from completing her work.

Sexual harassment of women in the extractive industries is not limited to the harassment of women working underground. While a majority of the reporting and statistics concern women miners, stories have emerged of sexual harassment of women working in other areas of the extractive industry. One report told the story of Carla Rojas, a risk prevention officer, who was, in part, tasked with examining sexual harassment complaints. After being randomly selected for a drug test on her first day at a new mine, Rojas was told by a laughing, all-male team of nurses that she had to let them watch her urinate to ensure she did not cheat. The same report also told the story of safety officer Karen Requena, who daily had to endure thousands of men leering and hitting their utensils against their plates as she tried to find a safe place to sit in the mine cafeteria.

Additionally, non-miner women employees also face escalating threats and risk of violence if they discuss or push back against sexual harassment. Susan Lomas, President of Lions Gate Geological Consulting and founder of Me Too Mining Association, was prohibited from going underground when she began working at one mine. After a new chief geologist gave her permission to work underground, her male officemates began pasting pornographic images all over the shared office space, which were replaced every time she tried to remove them. When Lomas spoke with her officemates about the

314 Id. at 52.
315 Id. at 44–45
317 Id.
318 Lombrana, supra note 311.
319 Id.
320 Id.
322 Id.
Images, one man threatened to put her hand in a rock crusher and break all of her fingers. Stories of sexual harassment within extractive industry executive offices are missing from these reports. The lack of reporting, however, does not necessarily indicate a lack of sexual harassment of women in higher positions. In regard to harassment in mining, Susan Lomas explains: “I’ve seen what I call the cult of personality in a lot of mining companies, where the CEO is very aggressive or a bully and the women just tend to leave. It’s a small industry, and there are already so few women in it. And the mentality is that if you stick your head up, it’s going to get chopped off.” While Lomas was speaking generally about the extractive industry, it seems that if high-level employees permit or perpetuate sexual harassment, it is likely seen at all levels of the industry.

Some organizations and researchers have sought to identify the root causes of sexual harassment against women in mining. One report on sexual harassment in Sub-Saharan Africa mining regions stated that sexual harassment and violence against women was “triggered by the influx of migrant workers, social disruptions, increasing disposable incomes and associated alcoholism, and higher rates of female employment in prostitution.” Phumeza Mgungo, the national secretary of the women’s section of South Africa’s National Union of Mineworkers noted that women miners are often viewed as “sex objects . . . [which] leads to sexual harassment.” Regardless of the reasons specific to mining, feminist scholars agree that sexual harassment in general is not an expression of sexual desire, but rather a means by which men assert power over the women.

Other Barriers Specific to Women in Field

Childcare Facilities

Historically, companies in the industry designed benefits packages for white men who were either single or had a stay-at-home spouse. In today’s environment, these benefits packages need to be rethought and to be made more flexible. Several interviewees identified accessible childcare facilities as the biggest need for women working in extractive industries. Gladys Smith, of International Women in Mining, states, “Companies are not prepared and do not have facilities for a mother to work after she has a child.” Without provision of childcare, corporations are “losing talent. They are losing women who are very talented but can’t go back to work if they don’t have the facilities to care for their children.” An expert observed that many of the women working in U.S. mines were single mothers. These women face a double-edged sword, in that they want to work in the mines to support their children, but the nature of the work makes it difficult for primary caretakers. The work may be long shifts that span 12 hours, may be irregular shifts that switch between day and night shifts, or, in the case of oil and gas, have shifting source sites that require mobility.

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323 Id.
324 Id.
327 Zoom interview with Pink Petro (Sept. 14, 2018); Skype interview with Ander Arcos, Alonso, Alliance for Responsible Mining (Colombia) (Sept. 14, 2018).
328 Skype interview with Gladys Smith, International Women in Mining (Sept. 6, 2018).
329 Id.
330 Telephone interview with Academic Expert (Sept. 4, 2018).
331 Id.
In the absence of accessible and available daycare, women or civil society assume the burden of coming up with a solution themselves. Women in U.S. mines traded child care with other women on the opposite schedule. In Papua New Guinea, where no mines had on-site daycare, mothers pay young female family members to watch infants in a building not equipped for child play. A non-profit organization, Guyana Women Miners’ Organization, assumes responsibility for meeting women’s needs or advocating before government agencies. The organization, which supports women miners, provides daycare within their office when clients visit, and also assists with locating childcare for women undergoing training. They leveraged their advocacy potential to get the commission and regulatory agency to provide for school transportation. Because workers go to work at 7:15am but schools do not accept children until 8am, they successfully lobbied for transportation that picks up children at the compounds and drops them off at school so parents do not have to leave their jobs.

Critically, childcare facilities must be accessible to mothers. As one expert stated, “I would have a nursery at every mine, in every company, in every city.” Another expert stressed that in industries that require longer or night shifts, daycares should be open 24 hours per day. Even when daycares are available, women may not have the financial means to pay for it.

**Equipment and Bathroom Facilities**

Experts have cited how equipment and uniforms are not designed to accommodate women. Equipment and personal protective gear used in the extractives industry, historically, have been designed for the physical attributes of men. Machinery, tools, and other equipment are designed for the male physique and use of these tools and equipment by women can cause greater risk of injury and production stoppage. Poorly-sized personal safety equipment, including safety gloves, glasses or goggles, shoes, earplugs or muffs, hardhats, self-contained self-rescue dust masks, harnesses, overalls, and reflective vests, exposes women to health and safety hazards and make them less able to perform their duties efficiently. One commentator noted that there are huge safety concerns with ill-fitting safety equipment in the oil and gas industry. The dangers include women tripping and falling due to baggy boiler suits and ill-fitting safety boots, impaired vision by loose-fitting safety goggles, and lung damage from ill-fitting dust masks.

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332 Id.
333 Macintyre, supra note 11, at 28.
335 Id.
336 Telephone interview with Academic Expert (Sept. 4, 2018).
337 Id.
338 Telephone interview with Gladly Smith, International Women in Mining (Sept. 6, 2018).
341 Beech & Vengeni, supra note 338
Another issue faced by women in the extractives industry is use of toilet facilities. For example, Linda Nakedi, of Women in Mining South Africa, described how mining uniforms are not constructed to enable women to easily go to the bathroom. An academic who worked in and specializes in U.S. coal mines, explained how equipment lacks bathrooms on board and requires re-design. While men can urinate on the side, women must either use a portable toilet or find a way to park their equipment in a way they can create privacy. In cases where this is not possible, some women resort to making jokes to cope with going to the bathroom in front of others. The expert found that women deal with the restroom infrastructure in two ways in open pit mines. First, women limit the water they drink during the workday, which poses a harm to their health. Second, women choose equipment with closer proximity to restroom facilities, such as haul trucks that pass by portable bathrooms. Haul trucks, however, are an entry-level position from which people advance to positions that set the pace and are in charge of crew. Where a woman has risen to the level where she is operating a shovel—the most prestigious position—she is forced to shut down the entire process to go to the bathroom. If she does not have her own truck there, she needs to take an additional step and call someone to transport her to the bathroom. Stopping work and traveling to a restroom facility risks conveying an image that women do “less work” than the men who can “go, go, go” all day.  

343 Green, Surviving the “Underground” Economy, supra note 81.
344 Telephone interview with Academic Expert (Sept. 4, 2018).
Harms to Women in the Communities of Extractive Industries

Women in the communities of extractive industries are directly impacted by the presence of the industry. Many of the impacts of mining can bring about benefits for women and broader communities. For example, women may have greater access to education and travel, enjoy improvements to infrastructure, such as roads, and see economic opportunities.345

Women, however, are often the most affected by the adverse impact of the extractives industry on their communities. Entrance of the industry into the community can create environment degradation such as contaminating the water, thereby requiring women to travel farther to get safe water. It also can destabilize social relations in the community and exacerbate existing gender inequalities.346 Food insecurity also is a concern at extractives industry sites. Traditionally, women are responsible for family food. Mines and oil and gas facilities that impact agricultural land and water directly impact women’s ability to grow adequate and safe food for the family. They then must purchase food at inflated prices for consumption. The result is food insecurity in poorer households which tend to be female-headed.347 Food scarcity likewise is a risk factor for transactional sex and communicable diseases.348

At times, women also face numerous barriers to full enjoyment of human rights. One expert stated that it was often difficult to find someone in the community surrounding the mine who was not connected to the mine in some manner, whether they were married to or were children of a miner.349 The expert found that mining was occurring in isolated areas, often where the surrounding community would not exist if not for mining.350 Gladys Smith noted that reaching the women who live and work in the communities surrounding the mines was difficult, but important work as “even if they don’t work in mines, they likely supply the mines.”351 These women’s lives are inevitably shaped by the extractive industry’s presence in their communities, and often their human rights are at risk of being compromised as a result.

In addition, the commercial sex industry tends to peak during construction stages when most mine workers are single men on short-term contracts.352 The women who trade or sell sex may be escaping situations of arranged marriages, poor economic situations, abandonment or financial debts by their husbands.353 Trafficking is common, where women are deceived into believing they are accepting other employment, such as a shopkeeper.354

345Parmenter, supra note 149, at 67.
349Telephone interview with Academic Expert (Sept. 4, 2018).
350Id.
351Skype interview with Gladys Smith, International Women in Mining (Sept. 6, 2018).
352Petra Mahy, Sex Work and Livelihoods: Beyond the ‘Negative Impacts on Women’ in Indonesian Mining, in GENDERING THE FIELD: TOWARDS SUSTAINABLE LIVELIHOODS FOR MINING COMMUNITIES 54 (Kuntala Lahiri-Dutt ed., 2011).
353Id. at 56.
354Id. at 58.
Exacerbation of Existing Gender Inequity

When the extractive industry enters a community, it becomes a disrupting force with the potential to amplify inequality in a community dominated by a patriarchal social structure. One report found that “the vulnerabilities women already experience frequently exacerbate the (often unconscious) gender blindness of oil project development, which tends to reinforce existing social hierarchies and favors (male) incumbents in positions of power.”355 If a community already abides by gendered labor norms, women generally take on more of the stress associated with environmental, economic, and social changes that occur when the extractive industry establishes a work site.356 Women’s gendered responsibilities—cooking, food production, taking care of children and the elderly, and finding fuel and water357—are devalued when the community becomes more economically complex, moving from a subsistence- to cash-based economy.358 When these roles become less valued and more invisible, women’s status within the community falls.359

The failure to engage women in the planning of an extractives industry site can have negative impact on women’s livelihoods. For example, in Malawi, where men traditionally are the decision-makers at the household levels, mining companies regularly resettle entire villages to make way for a mining site. As part of the resettlement, companies usually offer either to build new homes or compensation. Men, as heads of household, receive the compensation and make all decisions on how it is spent. The men often spend this money, not on building a new home for the family, but on personal matters such as luxury items, alcohol, prostitution or extramarital relationships, thus leaving the family homeless or in lower quality homes. Women are thus faced with the pressure of looking after households and children with no or limited resources, locking them in a state of impoverishment.360

One study found that “this change to a cash economy has been known to change spending patterns among male earners; for example, by increasing the proportion of household income spent on alcohol and sex workers.”361 Further, as the devaluation of subsistence work is coupled with the rising importance cash income, women become more economically dependent on the men in their lives.362 Thus, women become more dependent on another’s income and the male income earner is more likely to spend haphazardly rather than investing in the family.

Promising Practice: Guyana Women Miners Organization works with women who are landowners to provide them the opportunities to develop their skills, manage businesses, connect them with investors, and give them specific capacity-building training, such as GPS and map-reading training, so women can complete those tasks instead of spending money to outsource those tasks. The organization has also promoted access to training for women to qualify as laborers ranging from base operators or becoming cooks.363

355Scott et al., supra note 153, at 9.
356Id. at 5.
357Id. at 5, 22.
359Scott et al., supra note 153, at 5.
360Kachka, supra note 347, at 20–21.
361IFC, Tool Suite 3, supra note 358.
362Id.
Lack of Available Resources
In addition to the devaluation of gendered subsistence work, women often bear the burden of other changes within the community. These include pollution and land loss.\(^{364}\) As women are generally tasked with obtaining food, water, and fuel, they are more directly impacted by the decreased availability of resources.\(^{365}\) Women must walk further to reach water, agricultural land, and wood and other forest products that have not been compromised by pollution or destroyed by the industry’s use of land.\(^{366}\) One report found that “although the availability of productive land may diminish, women’s responsibilities for feeding their families do not. Women may be primary land users, but men most commonly hold land title and compensation payments therefore do not accrue to the most impacted parties.”\(^{367}\) The scarcity of nearby resources leads to increased local prices for those resources as well as increased prices for transportation to reach those resources that are further away.\(^{368}\) However, as these women may not have access to the influx of capital coming from the extractive industry, they may be unable to afford the nearby resources and may lack access to affordable transportation, requiring them to travel long distances on foot to obtain basics like food and water.\(^{369}\)

Barriers to Community Consultation
The introduction of an extractive industry and resulting lack of accessible food, water, and other resources is directly connected to a failure to include women in consultations prior to and during the extractives operation. Often, women face de facto exclusion from conversations and decision making processes regarding the extractive industry.\(^{370}\) Women may be excluded due to cultural factors, such as a lack of women in existing leadership roles or attitudes around women speaking out about their own concerns.\(^{371}\) They may also be excluded when conversations are only held with heads of families or property owners.\(^{372}\) Women may be further excluded when those consultations happen only in the larger cities, far away from the actual sites.\(^{373}\) This exclusion can increase community hostility and dissatisfaction with extractive companies, further dampening potential benefits of development.\(^{374}\)

John Strongman, a former Mining Adviser at the World Bank’s Oil, Gas, Mining and Chemicals Department, attended a Mining and Community Conference in 1996, where he saw a group of women protesting outside of the conference. When he spoke to the one of the leaders, she told him that women were worried about losing agricultural land to the mining operation and resulting food scarcity. Several years after the experience, Strongman recalled that “the mining company could have addressed this by working with the community on food security issues—but the problem was that no one was listening to the women.”\(^{375}\)
Even if women are permitted to attend conversations and negotiations, there is a chance that language barriers will prohibit women from meaningful participation. Women are more likely than men to not speak English or other dominate languages. One report noted that “women who were able to attend consultations to participate or (more commonly) to observe reported that companies had previously sent representatives who were not able to communicate in local languages or dialects.”

Research conducted in conjunction with the World Bank found that “it is vital to understand [women’s] priority needs, including those concerning their hopes and fears about the future, so a company can ensure that it is not going to worsen women’s situation but instead contribute to improving it.” Ultimately, when extractive companies do not consult with women, those women face greater environmental, economic, and social harms than men while obtaining fewer benefits from the extractive work.

**Unique Challenges of Women in Artisanal and Small-scale Mining**

Women play a larger role in artisanal and small-scale mining, or informal mining that uses less technology or machinery, than in the large scale mining sector. Women constitute 30 percent of the global artisanal mining workforce, and approximately 40 to 50 percent of that labor force in Africa.

Women in artisanal mining may be more vulnerable to risks, as they typically live in rural or semi-rural areas where socio-economic and environmental conditions may be harsh. In addition, risks are exacerbated due to a number of factors, including the transient nature of artisanal mining communities, the presence of many young men, the daily flow of cash, and high rates of alcohol and substance abuse. Artisanal mining is often also characterized by socio-economic problems, including poor camp conditions, resulting in substance abuse and sexual activity, child labor, environmental damage and localized inflation. In particular, the incidence of sexual and gender-based violence against women can be higher in artisanal and small-scale mining communities when certain factors are present, such as a weak or non-existent traditional village authority, the limited presence of police and judicial authorities, a workforce consisting of men who are without their families, harmful beliefs that subordinate women, cultural practices that condone sexual and gender-based violence, and the prevalence and acceptance of the commercial sex trade. Many artisanal mining regions also experience a high rate of HIV/AIDS.
While artisanal and small-scale mining presents health issues for all involved, there are additional health hazards particular to women. Women may transfer risks to their fetuses if exposed to toxins prior to or during their pregnancy, and adverse social behaviors associated with artisanal mining (such as drug abuse, alcoholism, stress) cause further damage to reproductive health. These risks can be exacerbated where artisanal mining takes place in remote locations outside the reach of governmental regulation. In addition, artisanal and small-scale miners may be exposed to numerous physical hazards due to the basic manual techniques or the lack of governmental oversight or regulation.

Women are often paid significantly less than men for the same number of working hours. This is in part because women tend to work at the lower ends of the production chain performing tasks such as washing, sorting, transporting, and are thus excluded from higher-level decision-making processes. Women in artisanal mining also face challenges when they lack access, either due to legal prohibitions or traditional norms, to land or the necessary licenses. Such systems allow men to control mining activities and exercise authority over financial matters. Because child care is often scarce, women must often bring their children to the mines. This affects the children in myriad ways, such as exposure to poor sanitary and environmental conditions or forcing them to forgo their education.

Finally, discrimination against women in artisanal mining is prevalent and reflects long-standing stereotypes and taboos. For example, women may be required to surrender any high-value stones to the male mine owners or may not be permitted to enter the mines for fear they will make the minerals “disappear;” in certain communities, such misperceptions encourage violence against women when harmful beliefs that male miners will be more successful if they take a girl’s virginity persist.

Efforts to address violations against women in artisanal and small-scale mining can target literacy and/or vocational training, establish village savings banks, and start small businesses. Authorities, investors and civil society should lobby local governments to address the hazards faced by women in artisanal mining, while companies can participate either directly or by funding programs.

387 Kuntala Lahiri-Dutt & Chasoul Inovvanh, Gender in Artisanal Tin Mining in Lao PDR 33–34 (2010); World Health Organization, Artisanal and Small-Scale Gold Mining and Health 16 (2016) [hereinafter WHO, Gold Mining and Health].
388 WHO, Gold Mining and Health, supra note 387; Asia Found., Gender Assessment of Small-Scale Mining in Mongolia 43–44 (2013).
389 WHO, Gold Mining and Health, supra note 387.
390 Hayes & Perks, supra note 382, at 532.
391 Id. at 534.
393 Lahiri-Dutt & Inovvanh, supra note 387, at 34; INTERGOV, Forum on Mining, Minerals, Metals & Sustainable Dev., supra note 294, 10-14.
395 Hayes & Perks, supra note 382, at 535.
396 Id.
397 Buss et al, supra note 392, at 28–30; Hayes & Perks, supra note 382, at 534; Hinton et al., supra note, at 15–16.
398 Hayes & Perks, supra note 382, at 534–535.
399 Id. at 536.
400 Id. at 540–542.
Violence Against Women

All of the above mentioned social consequences limiting women’s full enjoyment of human rights also increase the risk of family violence and disintegration. The World Bank found that domestic violence can “flourish” after extractive industries come into a community, as “less time is spent together as partners, the husband’s new cash income exacerbates the power inequality in the marriage, and disagreements arise over how new income will be spent.” The increased risk of violence exists in communities surrounding both industrial and artisanal and small-scale mining operations. Researchers have found that as men earn more money, they change their spending habits, spending more money on “alcohol, cigarettes, and other disposable items that do not benefit women and children.” This serves to make women more vulnerable and increase the risk of domestic violence. Researchers have also observed an increase in harassment, violence against women, and exposure to HIV.

The safety of women in the communities surrounding mines may be placed at greater risk if the company is unable to communicate with women due to language barriers. This is particularly true for women in rural areas who only speak their native language. An example from the World Bank illustrates this:

“In 2003, in a meeting between a community in the northern part of the jungle and the [extractives industry] company, the community women stated that they held the company responsible for the fact that their husbands hit them. Because the women were talking among themselves in Quechua and the company’s representative did not speak that language, she was not able to understand their complaints. Fortunately, another person who was present translated. It appeared that the women used to collect water from a source close to their homes, but now that source was contaminated (by the company), so they had to walk a longer distance to get water. This meant that the women did not have supper ready for their husbands when they got back from work, and that was why the men had started to hit the women. Consequently, the company built a well, and the immediate problem was resolved.”

While the Quechua-speaking women were fortunate to have someone at the meeting who was able to translate, this example demonstrates companies’ potential inability—rather than unwillingness—to address the needs to the community. If a company’s actions put women’s safety at risk and language barriers prevent the company from understanding the consequences of its actions, the harms against women are exacerbated.

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401 WarD et al., supra note 368, at 2.
402 Id. at 13.
403 BSR, supra note 52, at 23.
404 SCOTT et al., supra note 153, 22.
405 Id.
406 BSR, supra note 52, at 23.
407 WarD et al., supra note 368, at 15.
In addition to increased violence within their communities, women who have to travel long distances to access resources face a greater risk of sexual violence.\textsuperscript{408} Where extractive industries are located in a region facing resource-based conflicts, women are disproportionately put at risk.\textsuperscript{409} Civil society has stepped in to address the gaps and risks of trafficking in persons. The Guyana Women Miners Organization collaborates with 13 diverse NGOs and created a national networking group on trafficking in persons. They liaise with the police to ensure reports and investigations into trafficking occur, execute rescues of victims in the mining districts, and have created a safehome.\textsuperscript{410}

\textbf{Sex Trafficking}

The emergence of extractive industries in a particular location is often coupled with the socioeconomic phenomenon known as the “Boomtown Effect.” The Boomtown Effect is characterized by rapidly changing population and industry, which leads to a “host of social ills” including “increased rates of crime, drug and alcohol abuse, sexually-transmitted infections (STIs), and domestic violence; [etc.] . . .”\textsuperscript{411} The large influx of—primarily male—workers has a different impact depending on the size of the pre-extractive community, but can cause upheaval in smaller, rural areas.\textsuperscript{412} A troubling feature of this effect is the increased rate of violence against women and girls, particularly increased rates of sex trafficking.

The Bakken region of North Dakota, U.S.A. experienced such an effect in the early 2010s. Researchers found that “[t]he rapid oil development brought an influx of cash and thousands of oil workers living in ‘man camps’ with time and money on their hands. With this, the rates for murders, aggravated assaults and robberies tripled, while the rates for sex crimes, forcible rape, prostitution and sex trafficking, increased by 20.2 per cent.”\textsuperscript{413}

Researchers have also identified multiple factors that contribute to the increased rate of sex trafficking in extractive communities. The non-profit organization Verité found that “[w]henever there are large migrations of men to an area for employment (a risk indicator for human trafficking), there is a high demand for sexual services, which often generates sex trafficking. This is exacerbated when workers are living in isolated regions, away from familial and social connections.”\textsuperscript{414}

\begin{thebibliography}{99}
\bibitem{footnote:FC} FC, Tool Suite 3, supra note 358, at 9.
\bibitem{footnote:BSR} BSR, supra note 32, at 23.
\bibitem{footnote:Skype} Skype interview with Guyana Women Miners Organization (Aug. 31, 2018).
\bibitem{footnote:NBDOH} New Brunswick Department of Health, Chief Medical Officer of Health’s Recommendations Concerning Shale Gas Development in New Brunswick 5 (2012).
\bibitem{footnote:Verite} Verite, Strengthening Protections Against Trafficking in Persons in Federal and Corporate Supply Chains 70 (2015).
\end{thebibliography}
Many extractive industries tend to be in remote locations and are dominated by an unaccompanied male workforce, which increases the demand for commercial sex. The lack of surrounding infrastructure further increases a sense of boredom and isolation amongst miners. The “poor, often depressing, conditions” in which some miners live can result in workers “seeking out sexual services from women and girls.” As a result, women and girls from rural and impoverished regions become the vulnerable to sex trafficking. In 2010 in Peru, one NGO estimated that there were approximately 2,000 women working in about 100 brothels surrounding one mining area, and that 60 percent were minors.

Traffickers employ a variety of methods to deceive, kidnap, and entrap women and girls. Researchers at Verité discovered that, in Peru, some women are tricked into answering job offers to work as cooks, waitresses, and sales clerks to support the influx of workers. While some of these women ended up working in those roles, they were also forced to provide “sexual services” to the miners. Verité further reported that some women, including those who answered unspecified job offers to work in mining camps were trafficked into brothels “where they were threatened with physical and sexual violence if they tried to flee.” Additionally, reports indicate that some men brought their wives or girlfriends to work in the extractive industry also play a role as pimps by selling their partners to their mine co-workers. For example, “ngoanatsela” in South Africa refers to such pimping of young girls who miners bring from home as their “girlfriends.”

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415Sarah Steele, Human Trafficking, Labor Brokering, and Mining in Southern Africa: Responding to a Decentralized and Hidden Public Health Disaster, 43 Int’l J. Health Serv. 665, 671.
418Steele, supra note 415, at 666.
419Verité, supra note 414, at 66.
420Id. at 70; Global Initiative against Transnat. Org. Crime, supra note 417, at 29.
421Steele, supra note 415, 666.
Conclusion

Women are noticeably absent from much of the extractives industry. Highly educated women are pushed out by sexual harassment and lack of child care. State and regional laws and policies prevent women from obtaining well-paying jobs with upward mobility. Women in the communities surrounding extractive sites are left out of consultation. Numerous harms result from this conspicuous lack of women, as it does not exist within a vacuum.

States and extractives companies alike would benefit immensely through female inclusion and diversity in the extractives industry. Likewise, both the women employed by the extractives industry and the non-employee women in the surrounding communities could achieve economic independence and greater social mobility if the industry listens to the particular needs of all impacted women when implementing gender-sensitive reforms.
The following recommendations are directed to governments:

1. **Repeal or amend laws that discriminate against women in the workplace and in private life.** These include laws that impede women’s access to employment, land ownership, inheritance, ability to access credit or loans or enter into contracts, or impose restrictions to travel. Seek to amend laws in line with international legal standards of equality and non-discrimination.

2. **Ensure that effective laws on violence against women, including domestic violence and trafficking in persons, are in place.** Systems actors charged with implementing these laws should receive training, in consultation with civil society. The implementation of these laws should be adequately funded and regularly monitored for continuing reforms.

3. **Consult with and support civil society working on women's rights, violence against women, gender equality within the extractive industries, as well as the impacts of these industries on the community.** Ensure that barriers for women to fully and effectively participate in such consultations are removed so they can share their priority needs and concerns.

4. **Ensure and support services for victims of discrimination and violence against women.** Such services should be led by non-governmental organizations that best understand and serve women victim and survivors’ needs. Ensure that services for marginalized populations, including migrant and indigenous female workers, are customized to address their specific needs.

5. **Take steps to ratify and comply with all relevant human rights treaties,** including but not limited to, relevant International Labor Organization conventions, the Convention on the Elimination of Discrimination Against Women, the International Convention on Economic, Social and Cultural Rights, and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families.

6. **Conduct a regular gender audit that evaluates how gender equality is incorporated into policies, procedures, programs, budgets, and infrastructure of the country’s workforce.** The ILO’s Manual for Gender Audit Facilitators may serve as a model and practical guide at https://www.ilo.org/gender/informationresources/WCMS_187411/lang-en/index.htm

7. **Ensure the ongoing collection of accurate workforce and educational data.** Such data should be disaggregated by sex and also gather information on levels of academic achievement and ranking workplace levels.
8. **Ensure that girls and women can enjoy equal access to education.** Use gender-responsive budgeting and initiatives to support education, including STEM programs, for girls and young women.

9. **Undertake public information campaigns to raise awareness** on the benefits of female inclusion in the workforce and how to support gender diversity. In addition, public awareness efforts should seek to overturn harmful stereotypes, unconscious bias, and social norms that discriminate against women and girls.

The following outward-facing recommendations are directed to the extractive industry:

1. **Proactively lobby governments to change laws that discriminate against women.** Focus on those laws that impede women’s access to employment, land ownership, inheritance, ability to access credit or loans or enter into contracts, or impose restrictions on travel. Seek to amend laws to be in line with international legal standards of equality and non-discrimination.

2. **Consult with community stakeholders to ensure that actions and funding target what is needed.** Such consultations should be open, informed, and accessible to workers, both male and female. For example, this may mean ensuring that consultations happen in the community where the extractive project is taking place, rather than in the capital or large cities that are difficult or costly for worker and community members to reach.

3. **Ensure that entry-level or professional development training is accessible and located in the same communities as the mining workforce is.** In some countries, private companies provide all training in the capital or other large cities. As a result, workers’ capacity to gain professional development is limited by travel, expense, and family commitments.

4. **Foster collaborations with civil society working on women’s rights, violence against women, and gender equality within the extractive industries.**


6. **Develop strategies for the economic empowerment of local women either as workers or entrepreneurs.** Identify strategies for the economic empowerment of local women in the community where the project takes place. Establish requirements for subcontractors to employ local women workers and female owned firms; provide incentives for employing women or women owned firms; and promote joint ventures and alliances that include women owned firms.423

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423 AFRICAN NATURAL RESOURCES CENTER, AFRICAN DEVELOPMENT BANK, WOMEN’S ECONOMIC EMPOWERMENT IN OIL AND GAS INDUSTRIES IN AFRICA 8 (2017).
The following inward-facing recommendations are directed to the extractive industry:

1. **Establish gender diversity as a strategic business imperative at all levels of the organization, visibly led by the CEO and senior leadership.** Changing the culture is key; top leadership must be the driving force behind increasing gender diversity as many employees take their lead on the issues from senior leadership.


3. **Consult with diversity experts and organizations to build and support effective diversity programs.** Successful diversity programs set forth clear goals, have top-level commitment, have a clear communication system, encourage company-wide involvement, and provide for accountability in meeting goals.

4. **Set and maintain challenging, but achievable, goals and objectives for gender diversity.** Ensure there are diversity goals, metrics and standards for women as a percentage of board members, management, teams, and job levels, to prioritize recruitment and the promotion of qualified women and greater gender diversity. Importantly, female representation should not be limited to observer roles but have explicitly active roles to play.

5. **Recognize and mitigate unconscious biases in the recruitment, retention, evaluation, remuneration, promotion, and career planning processes.** Such efforts can include training for all management to understand diversity issues and to address personal biases, modifying procedures and infrastructure to diminish bias in decision-making, and understanding behavioral principles to influence ideas and inhibit bias.

6. **Promote STEM programs for girls and young women.** To deepen the talent pool, develop outreach and partnership programs at the middle school, high school, and university levels to promote STEM for girls to encourage the next generation. Company leaders and mentors must work to encourage girls and young women to choose science and technology as a career path and should sponsor and train talented women in business schools.

7. **Establish clear recruiting targets for women and men in all areas of employment for technology roles.**

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424 World Economic Forum, Closing the Gender Gap in Oil & Gas: A Call to Action for the Industry 1 (2016).
427 WEF, Closing the Gender Gap 1 (2016).
428 Pink Petro, A Response to World Economic Forum Call to Action in Closing the Gender Gap in Oil & Gas 6 (2016).
8. **Emphasize the wide range of job types available to women in the industry.** Promote roles in engineering, the sciences, supply chain operations, geological research, environmental science and management, etc. Avoid job descriptions, announcements, advertisements and recruiting materials that use biased or gendered terms like “he/she” or “foreman.”

9. **Increase the number and visibility of senior leaders in the industry as role models.**

10. **After hire, ensure women are offered the same career advancement opportunities as men.** Women should be encouraged to make their career goals clear, to create a career path plan, and to request career opportunities that include greater demands. Companies should ensure women are given equal opportunity to participate in career-relevant training and networking. Companies also should ensure that unstated assumptions about whether women have the skills or flexibility for a position do not influence job or promotion decisions.

11. **Develop separate and sufficient facilities and accommodations for women working in field roles.** Take into consideration women’s preferences, perceptions, and needs when designing work and living space for women in the field, including adequate lighting and toilets, uniforms, and on-site health facilities with at least one female staff member. Design and provide tools and equipment, safety devices, and required clothing that is sized appropriately for women.

12. **Create and implement work-life policies and offer services that make the company more accommodating for both genders.** These can include paid parental leave upon birth or adoption of a child, flextime, flexible work arrangements, on-site childcare facilities, and transportation for employees working in the field, etc.

13. **Create clear guidelines for job promotion and pay.** Define promotion criteria and standards fully based on skills and accomplishments and apply equally to women and men. Ensure promotion decisions are objective, taking into consideration only the employee’s qualifications. Develop pay grades for all positions to ensure equal and fair compensation for women and men performing the same work or job.

14. **Create a sponsorship and mentoring programs for women employees.** Require senior level employees, both male and female, to sponsor talented younger female employees and provide one-on-one mentoring and leadership coaching. Sponsors should provide career guidance and sponsor female employees for career advancement. This is key in the area of technical and expatriate jobs in the field, which often are stepping stones to more senior roles.

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432Id. at 23.

433Id. at 30.

434Pink Petro, A Response to World Economic Forum Call to Action in Closing the Gender Gap in Oil & Gas 6 (2016).

15. Implement leadership development training programs for women.\textsuperscript{436} Develop in-house or use outside programs to promote diversity balance at the senior levels of the company.

16. Provide women with opportunity for roles and responsibilities they may not have considered for themselves. Give them the support and training necessary to achieve success in the roles.\textsuperscript{437}

17. Broaden the career paths from which senior-level employees are identified or selected.\textsuperscript{438} Traditionally, high potential employees are selected from a small number of career paths that are predominantly male-populated. Alternative career paths must be considered to expand and diversify the pool from which top company officials are promoted.

18. Ensure sexual harassment and anti-retaliation policies are in place, including recourse to an effective remedy.

\begin{itemize}
\item \textsuperscript{436} Pink Petro, A Response to World Economic Forum Call to Action in Closing the Gender Gap in Oil & Gas 4 (2016).
\item \textsuperscript{437} BCG & WPC, UNTAPPED RESOURCES 28 (2017).
\item \textsuperscript{438} Id. at 28.
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