

Gender

How a Remote Australian Mine Became a Gender-Balanced Workplace

by Erik Denison and Richard Pringle

July 13, 2023



HBR Staff/Unsplash

Summary. While many industries have struggled to reach — and sustain — gender equality, progress has been particularly slow in mining and other traditionally male-dominated industries. While women comprise only 10% of workers at other large mines globally, South Flank,... [more](#)

The pace of progress on gender equality in workplaces has been “glacial.” The United Nations has found it will take nearly 300 years for women to achieve full workplace and social equality

globally. Progress has been particularly slow in mining and other traditionally male-dominated industries. A recent mining industry report found executives have focused heavily on increasing the number of women working in their head offices, but there has been little change to the gender balance in their frontline operations.

The UN has found a key barrier to progress across industries has been “backlash” from men who feel they are being personally disadvantaged by the need to correct centuries of disadvantage experienced by women. Detractors in mining resist change by making claims that women are “uninterested” or “unable” or “unsuited” to do the high-paying, secure, operational jobs such as drilling holes, blasting rocks, driving giant trucks, or maintaining heavy machinery.

Now, a remote mine in Western Australia has proven these detractors wrong.

At South Flank, an iron ore mine operated by the world’s second-largest mining company, BHP, 40% of the 869 frontline employees are women. Even more remarkable, a majority of senior managers — four out of six — are women. For context, the International Labour Organization found an average of just 10% of workers are women at other large mines around the world. South Flank, to the best of our knowledge, is the most gender-balanced large mine in Australia and also, likely, the world.

When we collected the data reported in this article, we had only been commissioned to deliver a series of five workshops to South Flank’s leaders on changing sexist and homophobic behaviors in traditionally male-dominated settings. We were not commissioned to conduct any research. However, while delivering the workshops, we became aware of the unique progress that the mine has made on gender equity. This is why we

decided to collect data (with permission) via observations and interviews to understand how this progress was made, so that we could share this information with other organizations (through articles like this). Subsequently, South Flank has engaged our faculty and our university's behavior science institute to provide additional support with changing harmful and exclusionary behaviors.

Why 40% matters

International organizations generally define a gender-balanced workplace as having 40-60% women (or men) as well as a workplace where men and women have equal power and influence. At 40%, which the International Labour Organization has determined to be the baseline for sustainability, it is likely that there would be at least 3-4 women (or men) on every crew at a mining operation (typically 8-12 people). This is important, because people generally do not want to be the only person of their gender on a crew. There is a century of evidence that people feel a greater sense of belonging and safety when they are in groups with others from similar backgrounds. Importantly, negative behaviors such as bullying and discriminatory language are less common in gender-balanced work settings, in part because the negative influences of gender norms are weakened. Indeed, BHP's own analyses found its gender-balanced teams are more productive, happier, more engaged, and critically, they are safer, with 67% lower recordable injury rates.

Leaders of similar types of businesses in urban areas are struggling to attract women. In the United States, for example, women comprise just 10.9% of workers in the construction industry, and they are overrepresented in traditionally female-dominated office roles (e.g., marketing, HR, finance) whereas at South Flank, most people work in frontline roles (e.g., mechanics, truck operators, electricians) and there are very few traditionally female-dominated office jobs.

Why can't this be done at all businesses?

South Flank is located in one of the hottest places on Earth. Employees often work outside, and temperatures in excess of 113 °F (45 °C) are not uncommon. The mine is also located more than 1300km (800 miles) from the nearest major city (Perth). This means most employees must take a two-hour flight from Perth, and then work 12-hour shifts for eight days before they fly home for a six-day break.

We were curious how this isolated mine has made progress on gender equality while similar workplaces globally have floundered. We spent six weeks in late 2022 at the mine after South Flank's leaders commissioned us to deliver a series of workshops on the science of changing negative behaviors in traditionally male-dominated settings, a topic we have studied for decades. We flew in and out each week and worked, slept, and ate like any other employee. We were given total and unrestricted access, which is why, with permission, we decided to use the opportunity to collect data through observations, interviews, and surveys. We wanted to understand what makes South Flank unique. (For disclosure, managers at South Flank were given the opportunity to review this article, prior to it being submitted. They were primarily focused on ensuring we did not release confidential information about their operation. They did not make changes to our research findings.) Our research identified five drivers of progress on gender equity at South Flank — but also some emerging threats to the sustainability of this progress and current gender relations there.

1. Strong engagement from senior leaders who set strict gender equity targets

The mine's General Manager (GM), Steve Campbell, and his senior managers have driven progress through deliberate planning, significant investments, hard work, and creativity. This is consistent with a large body of research which has found

workplace diversity does not happen “with time” or by accident, or through mandatory online training programs (these can in some cases actually make things worse). Progress like theirs also requires more than “support” for diversity from senior leaders; this type of change requires their deep engagement.

To drive engagement from leaders at all levels of the operation, South Flank’s GM set gender equity targets for middle managers. These targets are the same as those they habitually set for iron ore production. Targets work to drive action on diversity and, importantly, they are a normal and a highly effective tool used in mining to achieve better business outcomes.

Middle managers have then been supported to find ways to achieve their targets. For example, they have been allowed to restructure their departments to recreate entry-level roles, which has increased the pipeline of potential workers. This is important because most men working in mining were hired without skills and were given the opportunity to learn on the job.

Problematically, for women, most entry-level roles have been eliminated at modern, technology-heavy mining operations. By recreating entry-level roles, South Flank has been able to hire women with a wide variety of professional backgrounds (e.g., farmers, nurses, truck drivers, mechanics, athletes, teachers, hair stylists) who have since become skilled mining employees.

2. Strong support from leaders at the head office

South Flank’s GM and senior managers have themselves received strong support from BHP’s senior executives. The mine is relatively new, and our conversations with senior leaders at BHP suggest the company understands that it cannot operate a diverse and gender-balanced mine in the same way as it has operated its traditional mines. South Flank is hoping to be the prototype for the mine of the future. BHP is aware of the financial and social importance of achieving a gender balance within the mining

industry, however, there is no roadmap for operating a gender-balanced mine. South Flank and another BHP mine in South America, with a 30% gender balance, are helping the global mining industry figure out how to build the road to gender equality.

The support from senior BHP leaders has taken many forms, such as allowing South Flank to hire additional trainers to support women who are new to mining. South Flank has also been allowed to pilot a range of successful innovations. For example, investments have been made to modify machines and equipment so they can be used by people of different body types and sizes. A sociologist has also been hired to work directly with managers to help them foster more positive and inclusive teams. Another innovation is a unique three-day onboarding and site familiarization program which was developed to support new hires. It is delivered by a team of specialists, but also by senior leaders, including the mine's GM. We interviewed and surveyed the recent hires, and they told us they had never been personally welcomed on their first day of a job by the GM or a senior manager. The new hires said this unique onboarding program made them feel welcomed, a sense of belonging, and excited to begin work.

3. Major investments in fostering a welcoming and safe mining camp

Mining employees often live in residential camps when they are at work. Traditionally, the after-work focus has been on socializing over drinks at the on-site, company-run tavern. South Flank's leaders deliberately offered alternative ways to socialize and to foster a positive, village-like culture attractive to everyone, especially women. They seem to have succeeded. For example, we were struck by the number of people who smiled and opened doors for each other, which is something we have not seen at other mining operations.

BHP has invested heavily in recreational facilities at South Flank, including two gyms, soccer fields, an outdoor pool, a library, a music room, an Indigenous education center on a hill overlooking the mountains, walking and fitness circuits, basketball and squash courts, and even an indoor golf simulator. In addition, there are numerous grassy areas for people to socialize away from the tavern. To encourage new hires to interact with other people, a team organizes daily events such as trivia nights, food festivals, aerobic classes, visiting speakers (e.g., professional athletes) and nightly cooking classes in a purpose-built “MasterChef” style kitchen.

The company has also made major investments in safety systems, particularly since a government inquiry was held last year to investigate the high rate of sexual assaults and sexual harassment within the mining industry more broadly (the inquiry research found 36% of women and 10% of men have experienced some form of sexual harassment within the last year). At South Flank, over \$100M has been spent on new lighting, CCTV, electronic door locks, and security. Additionally, new policies have been introduced, such as strict limits on daily alcohol consumption (four mid-strength alcoholic drinks).

4. Use of science and data-driven approaches to drive change

These alcohol limits are an example of scientific research being used to identify evidence-based methods to reduce the risk of sexual harassment and sexual assault. The mine is now working with social scientists to identify other data-driven methods to stop exclusionary and harmful behaviors. For example, we were hired to deliver a series of workshops to over 100 supervisors and mid-level leaders. They were interested in the latest research on changing behaviors, particularly the sexist and homophobic language (jokes, banter) which remains pervasive and is a key risk factor for sexual harassment and assault. In addition, we supported the delivery of a new “Active Bystander” training

program that was co-developed with researchers from other universities. This program is being rolled out across all BHP operations. Bystander training gives people an opportunity to practice challenging disrespectful behaviors they observe. Surprisingly, multiple trials have been published on the effectiveness of this type of training in schools, but we have found no published trials conducted in workplaces. South Flank is helping to address this research gap. Along with our colleagues at BehaviourWorks Australia, we are working with South Flank's leaders to conduct a world-first trial, in mining, to measure the short and long-term benefits of delivering workplace bystander training.

5. Recognition that gender equality is hard to achieve and sustain and requires ongoing work

South Flank's leaders have come to recognize that achieving gender equality is about more than achieving a number; it is a process of learning and change that requires continued focus and hard work. This ongoing work is illustrated by their recent efforts to stop the normative sexist and homophobic language that can harm employee well-being and retention. Ending this behavior will require changing the mining industry's deeply entrenched masculine norms and culture. This culture, itself, is a key factor in why the long-term retention of women has proven to be a challenge in mining, with women leaving because of lack of inclusion and growth opportunities. There is also an urgent need to develop effective systems and processes to support parents who want to return to their frontline jobs at remote mines after having a child. Unless resolved, this emerging problem in mining, and similar industries, will pose a major threat to the sustainability of progress on gender equity. More broadly, senior executives and board members will need to be ready to redesign business models that depend on a workforce that is primarily male and which, traditionally, has not borne family and childcare responsibilities.

We must stop blaming women for the lack of progress

South Flank's leaders have crushed myths that women do not want high-paying mining jobs driving trucks, blasting rocks, and fixing heavy machinery. If a remote mine in Western Australia can achieve a 40% female workforce, and over 60% in senior leadership, then we believe this can be done by any business. Importantly, both women and men told us they appreciate the efforts to create a gender-balanced workforce. For example, one female dump truck driver in her early twenties said:

“At my old mine, there was only myself and one other female on the crew, and I'd get snarky comments and people being rude. But here it is a lot more balanced, people are nicer, and I feel really safe here. [At the other mine] you'd really have to fight for your place. Especially moving up, starting as a greenie, you'd really have to fight to get anywhere. Whereas here, all you have to do is obviously show good work ethic and be a good person and get along with everyone well and then you just find that you move your way up.”

A male production supervisor in his fifties similarly said, “it's a nicer, more friendly, and supportive work environment with all the women now working here.” He then added that he is happy that his 23-year-old daughter is now working at South Flank: “It's a good environment and she's adapted really well. So I am happy for her to be in mining.”

South Flank is a case study that once again demonstrates that progress on gender equality in any organization requires deep engagement and hard work from senior leaders. However, our research has also found that sustainable progress will require significant and ongoing investments to develop ways to meaningfully change workplace behaviors and cultures which remain exclusionary to women.

Erik Denison is a research fellow with Monash University's behavior-change institute, BehaviourWorks Australia, and with the Faculty of Education. He is the recipient of over a dozen industry awards for his research, public education campaigns, and journalism.

Richard Pringle is an Associate Dean in Monash University's Faculty of Education. He has studied the drivers of behavior in traditionally male settings for over 20 years.

Recommended For You

How Managers Can Dismantle "Benevolent Marginalization"



Research: Why Managers Deny Inequity in Their Own Organizations



Can the Construction Industry Be Disrupted?



PODCAST

Women Who Are Making Work Better for Women

