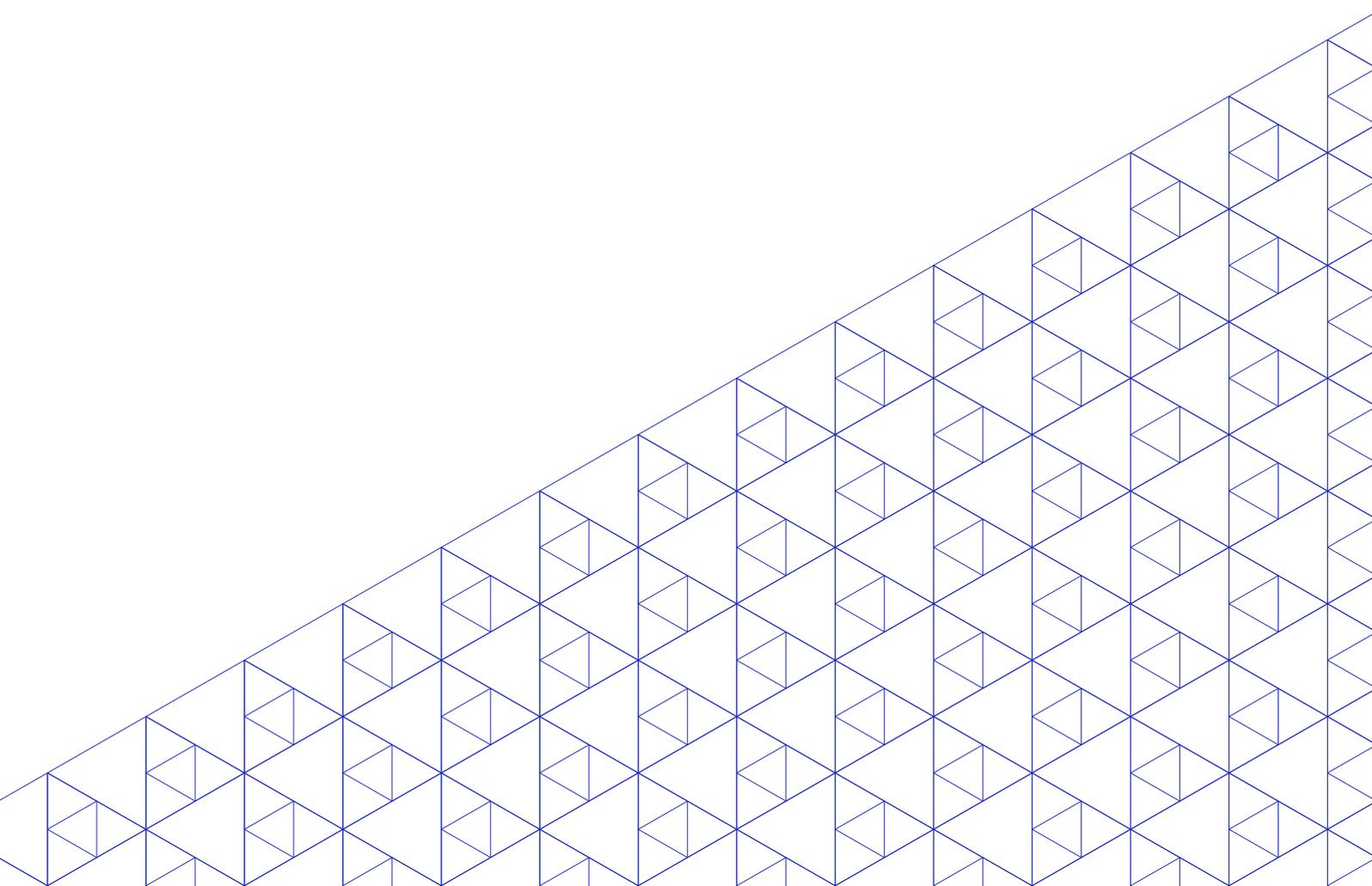




► **Turning up the heat: Exploring potential links between climate change and gender-based violence and harassment in the garment sector**

Authors / Laurel Anderson Hoffner, Joni Simpson, Cristina Martinez, Aruch Patumtaewapibal





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Abstract

Violence and harassment are widespread issues within the garment sector in Asia (Better Work 2019a), and with the effects of climate change increasing, it is possible that these behaviours could escalate. Using Bangladesh as a case study, this working paper will highlight the intersection between climate change and gender-based violence and harassment by exploring how climate change, measured by increasing heat stress and extreme weather events, could lead to heightened violence being faced by the (mostly female) workers in the sector as a result of its impact on productivity. It is important to note that gender-based violence in the world of work exists independently of climate change; however, evidence finds that violence in the garment sector can be linked to workplace intensity, which is likely to be further stressed by the impacts of climate change, should current trends continue. In addition, gender-based violence tends to increase with higher levels of socio-economic vulnerability, which climate change will also increase. Accordingly, while addressing harmful social norms is key to improving gender equality and reducing gender-based violence and harassment in the world of work, this working paper will explore how climate change will further exacerbate the factors associated with the prevalence of such behaviours within the current context and how, if left unaddressed, this combination of factors could ultimately contribute towards heightened levels of violence and harassment within the garment sector.

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Introduction

In 2019, the International Labour Conference adopted Violence and Harassment Convention No. 190 and Recommendation No. 206, 2019, to eliminate violence and harassment in the world of work, recognizing that violence and harassment, including gender-based violence and harassment, are incompatible with decent work. These instruments highlight the importance of an inclusive, integrated and gender-responsive approach to addressing violence and harassment. This includes consideration of underlying causes and risk factors, such as gender stereotypes, multiple and intersecting forms of discrimination, and unequal gender-based power relations.

Instances of violence and harassment in the garment sector – largely against women – have been well documented, and there is evidence that points to patterns of shorter lead times and decreasing profit margins per item as one of the main drivers of workplace intensity and poor labour practices (Vaughan-Whitehead and Pinedo Caro 2017; McKinsey & Company and BOF 2020). These practices in turn can lead to various forms of violence and harassment in the workplace as an attempt to increase productivity (Anner 2018; Gibbs et al. 2019; HRW 2019).

Alongside violence and harassment, concerns regarding the environmental sustainability of the garment sector are growing. For instance, the sector's usage of energy and carbon emissions amounted to the equivalent of 1.7 billion tons of carbon dioxide in 2015 alone (United Kingdom 2019). These concerns are being exacerbated by climate change, which is expected to lead to increased heat stress and extreme weather events that could result in decreased productivity in the workplace, among other serious implications (ILO 2019b; Kjellstrom et al. 2016).

It is important to note that gender-based violence and harassment in the world of work exists independently of climate change; however, heat stress and extreme weather events will have a knock-on effect on productivity and intensity – factors that have been found to lead to increased gender-based violence and harassment. Therefore, in the absence of improved climate resilience and decreased workplace intensity in the supply chain, these intersecting factors, which will be further strained by climate change, may lead to an increase in gender-based violence and harassment in the garment sector.

While more research is needed in this area, this working paper will consider this argument by highlighting gender-based violence and harassment in the garment sector and summarizing some of the anticipated impacts of climate change in Asia, followed by a discussion on the intersection of violence and harassment and climate change in the garment sector, and a brief exploration of this information in the context of Bangladesh. The paper will conclude by providing an overview of the emerging issues and suggested areas of future research.

► 1 Violence and harassment against garment workers is a documented concern

Violence and harassment, including gender-based violence and harassment, are incompatible with decent work, and a threat to equal opportunities and safe, healthy and productive working environments, according to ILO Convention No. 190. Though violence and harassment are a widespread phenomenon present in all countries regardless of the sector, occupation or work arrangements, such behaviours are exacerbated by intersecting factors such as persistent inequalities, demographic shifts and changes in work organization and technology. These characteristics are visible within the feminized garment sector, where an estimated 80 per cent of the workforce are women, many of whom are working in countries where gender inequalities such as pay gaps, disproportionate care obligations, inconsistent implementation of maternity protections, and a lack of women's voice, representation and leadership are prevalent.

Persistent patterns of physical, psychological, sexual and economic violence and harassment against women workers in garment manufacturing hubs have been documented. For instance, in a study conducted by Better Work (2019a), a joint factory improvement scheme operated by the ILO and the International Finance Corporation, around four out of every five workers in Indonesia stated that sexual harassment or sexual touching is a concern in their factory. In Bangladesh, an estimated 80 per cent of women garment workers have experienced or witnessed some form of sexual harassment in their workplace (ActionAid International 2019; Morris and Pillinger 2018).

Data collected by Better Work in Cambodia found that nearly a quarter of respondents (23 per cent) had been offered quid pro quo benefits in exchange for sexual favours. The most commonly reported benefits were for better treatment or pay (35 per cent); followed by hiring (25 per cent); a report documenting the achievement of the production quota, in itself linked to pay (20 per cent); ending the probationary period (11 per cent); and a promotion (9 per cent) (see figure 1).

► **Figure 1. Types of quid pro quo benefits offered in exchange for sexual favours**



Violence linked to production quotas

Thin margins, high levels of uncertainty and short production timelines are common features of the global garment industry; however, they create significant financial risks for suppliers and can place downward pressure on working conditions on the factory floor. Numerous sources, including an ILO study (Vaughan-Whitehead and Pinedo Caro 2017), have linked purchasing practices with increased levels of workplace intensity and poor labour practices, which in turn can fuel workplace harassment as an attempt to bolster production levels (HRW 2019; Gibbs et al. 2019).

Indeed, according to a report produced by Better Work, verbal harassment is more likely to occur in the following conditions: (1) when workers have low wages; (2) when supervisors' pay is linked to production levels; and (3) when there are too many rush orders (Rourke 2014).

Though violence and harassment towards garment workers is often an attempt to increase productivity, a study conducted by CARE International (2017) found that such practices have the opposite effect. Instead of increasing productivity, these behaviours lead to increased turnover, absenteeism and presenteeism, amounting to an estimated cost of US\$89 million per year in Cambodia alone.

Violence linked to the gendered nature of the workforce

Gender-based violence and harassment also stem from unequal power relations and broader norms found in society (Cruz and Klinger 2011). Women's participation in the workforce can challenge traditional gender roles in several ways, including enhancing their economic and decision-making power, increasing their mobility and freedom of movement, and reducing the amount of time they have available to contribute towards unpaid care work. This can lead to tensions both within the home and within the workplace.

Perceptions of women's roles, abilities and aptitudes are both a cause and a consequence of widespread violence and harassment throughout the sector, as well as of women's employment being concentrated in the lowest-paid and lowest-skilled roles. For example, though they account for 80 per cent of the sector's workforce in Bangladesh, only 5 per cent of factory supervisors are women (Naeem and Woodruff 2015). Furthermore, harassment is commonly perpetrated by male managers through inappropriate slurs or touching of a sexual or gendered nature (FWF 2018).

The risk of experiencing violence and harassment can be compounded by intersecting qualities such as gender, age and migration status. This is concerning, as a majority of workers in the garment sector are women under the age of 30 and/or migrant workers (Better Work 2019a), characteristics associated with a higher risk of experiencing such behaviours.

Furthermore, for some women, negative attitudes regarding working women's status are also evidenced in the home. In Bangladesh, for instance, there is evidence that finds garment workers are subject to higher rates of intimate partner violence than non-income earning women (Al Mamun et al. 2018).

The above presents a scenario in which price pressures and lead times as well as unequal gender relations in society are among the most significant drivers of workplace violence and harassment. This therefore suggests that should the impacts of heat stress and extreme weather events – which are increasing due to climate change – result in decreased productivity in the garment sector, it could lead to increased rates of violence and harassment against garment workers.

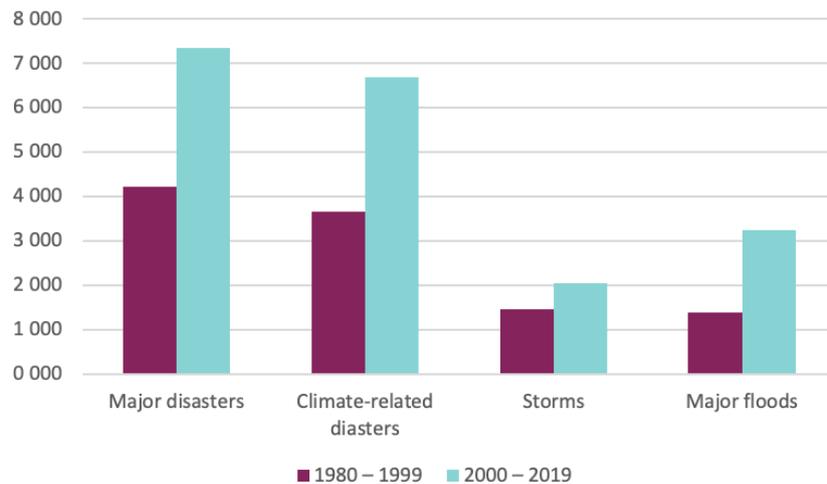
▶ 2 The impact of climate change on the garment sector

Climate change is increasingly impacting countries around the world, including through increases in temperature and heat stress, as well as increases in the number of extreme weather events. These impacts are expected to become even more significant in the coming years.

For instance, assuming a global temperature increase of 1.5°C by the end of the twenty-first century, the ILO (2019a) estimates that by 2030, 2.2 per cent of total working hours will be lost due to heat stress. This would result in a productivity loss equivalent to 80 million full-time jobs or US\$2.4 trillion (PPP). In addition to productivity impacts, heat stress can have significant implications on human health, including, but not limited to, discomfort, physical limitations, injuries and heat-related illnesses such as heat exhaustion, which impairs physical and cognitive functions. Workplaces with poor ventilation or cooling systems present higher heat-related occupational safety and health risks (ILO 2019b). Furthermore, the intensity of heat waves is likely to be more severe in urban areas, where buildings and roads lead to the absorption of more heat than surrounding areas.

In addition to the potential impacts from heat stress, the growing number of extreme weather events will also have an impact on productivity in the garment sector. According to a report by United Nations Office for Disaster Risk Reduction and the Centre for Research on the Epidemiology of Disasters (2020), from 2000 to 2019, there were 7,348 major recorded disasters, compared to 4,212 disasters between 1980 and 1999 (see figure 2). Climate-related disasters, which include extreme weather events, account for the largest area of increase – growing from 3,656 climate-related disasters between 1980–1999 to 6,681 during 2000–2019. Furthermore, during this time the number of storms, which includes hurricanes, cyclones and storm surges, increased from 1,457 to 2,043, and major floods more than doubled from 1,389 to 3,254. These disasters over the past 20 years alone have led to the loss of 1.23 million lives, had an impact on 4.2 billion people, and prompted global economic losses of US\$2.97 trillion.

Though gathering accurate data on violence and harassment can be difficult due to sensitivities and attitudes associated with reporting such behaviours (such as victim-blaming, fear of repercussions, and cultural acceptance of such practices as “normal”), research shows that both men and women, but especially women, are more likely to experience increased violence following natural disasters (UN Women 2014). While the link between the two events is clear, continued research is needed to better understand this issue.

► **Figure 2. Increases in natural disasters between 1980–1999 and 2000–2019**

Source: United Nations Office for Disaster Risk Reduction and the Centre for Research on the Epidemiology of Disasters 2020.

Alongside garment-producing countries experiencing the effects of climate change, the sector's own contribution to environmental degradation is of concern. For instance, the fashion industry uses approximately 79 billion cubic meters of fresh water annually across the entire value chain (United Kingdom 2019). In addition, large volumes of wastewater containing hazardous substances used in the garment and textile manufacturing process are released into rivers and water courses without appropriate treatment, leading to an estimated 20 per cent of the world's industrial water pollution (EMF 2017).

Climate change could also impact the price of materials, such as cotton, as well as transportation costs throughout garment supply chains, further adding to price and productivity pressures faced within the sector. Climate change impacts cotton production specifically by changing the amount of water available for irrigation, the length of the growing season, and creating more hospitable environments for pests – factors that can influence the profitability of cotton crops. A study conducted by researchers at the University of Nigeria and University of Togo sampled 172 cotton farmers and found that climate change (measured by changes in monthly temperatures and rainfall from 1980 to 2015) has negatively impacted cotton production by 1 per cent, leading to a loss of yield efficiency equivalent to \$745 per farmer (Soviadan et al 2019). The changing prices of inputs due to climate change therefore represent another area for consideration in regard to increasing pressures within garment supply chains.

Productivity stress to potentially increase due to climate change

Though there is increasing pressure for garment manufactures to become more productive, climate change may make it more difficult for this to occur. While many studies, including the ILO (2019a) report *Working on a Warmer Planet*, have examined how excessively warm temperatures are linked with losses in productivity in general, relatively few of these studies have been conducted within the garment sector.

One that has investigated this relationship, however, is a study conducted by researchers from the University of Chicago (Somanathan et al. 2018). Using temperature and output data over a 15-year period, researchers explored how high outdoor temperatures impacted both productivity at work and increased absenteeism in the cloth weaving, garment sewing and steel infrastructure sectors in India. They found that productivity decreased from 2 to 4 per cent per degree Celsius on warm days. Their study also suggests that while controlling for temperatures inside the workplace can decrease the negative impacts of heat on productivity, it does not influence increased rates of absenteeism – which can be weather-related (for example, monsoons).

Similarly, another study involving 26 garment factories in India found that once the temperature within a factory passed the tipping point of approximately 29°C, for every degree increase, productivity decreased by 3 per cent and profits decreased by 2.2 per cent (Adhvaryu, Kala and Nyshadham 2018).

These studies highlight the importance of temperature in sustaining workplace productivity, yet data suggest that suppliers in the garment sector are already struggling to effectively control temperatures in the workplace. For example, of the factories in Bangladesh who voluntarily participate in the Better Work programme, 17 per cent were not compliant with temperature standards at the time of an assessment completed in 2019 (Better Work, n.d.).

In addition to heat-stress causing decreases in worker output, climate change has the potential to further decrease levels of productivity through increased rates of weather-related absenteeism. According to a preliminary study involving 15,000 workers in Dhaka, the non-governmental organization BSR found that monsoons and excessive precipitation increased the rate of sick leave by 10 percentage points (Sebastio 2018). Using this extensive dataset, researchers also concluded that months with an average temperature of 30°C in outside temperature correlated with a productivity decrease of 2 per cent.

Though the literature on the secondary impacts of climate change on working conditions in the garment sector is limited to date, these studies demonstrate how both changing temperatures and extreme weather events could increasingly affect levels of productivity, which in turn can impact levels of violence and harassment.

▶ 3 A focus on Bangladesh

The impacts of climate change are visible across Asia through changing patterns of rainfall and increasing the frequency and intensity of hot days (that is, those with temperatures above 35°C). In Bangladesh, for example, the average number of hot days (typically falling between June and August) increased by 26 days annually in recent decades (USAID 2015), and this number is projected to continue to rise to an additional 35.8 days per year by 2050 (World Bank, n.d.). The number of hot days will further impact levels of heat stress and working hours. For instance, the ILO (2019a) estimates that by 2030, 4.84 per cent of working hours in Bangladesh will be lost due to heat stress. This is the equivalent of 3,833,000 full-time jobs.

Every year a number of extreme weather events such as monsoons, cyclones and floods occur in Bangladesh. These severe weather events not only disrupt the economic activities on which the country depends (agriculture, forestry, fishing and manufacturing), but also lead to severe health consequences. Over the past 20 years, 60 per cent of deaths caused by cyclones globally have occurred in Bangladesh (World Bank, n.d.). These events have been, and will continue to be, further impacted by increased frequency and intensity of rainfall, which is projected to increase by an average of 53.6 mm in coming decades.

Other factors commonly found throughout the region, such as flat topography (which increases vulnerability to flooding), sea-level rises and droughts, as well as underdeveloped infrastructure and large populations, place countries within South and South-East Asia at a high risk of being hit hard by climate change (Eckstein, Hutfils and Wings 2019). This will be exacerbated by the garment and textiles sector, which currently requires large quantities of water for cotton production and dyeing; contributes high levels of wastewater contamination; and releases a significant amount of emissions (amounting to between 6 to 8 per cent of annual global carbon emissions) throughout the production and manufacturing process (Niinimäki et al 2020). Furthermore, garment factories are often located on or near riverbanks that are susceptible to flooding.

What does this mean for the garment sector in Bangladesh?

As gender-based violence and harassment is already pervasive throughout Bangladesh and within the garment sector, and perceived or actual lower productivity is a driver of violence and harassment in the workplace, falling levels of productivity due to climate change has the potential to result in heightened levels of violence and harassment against women garment workers. This could be exacerbated by increases in violence following extreme weather events and other climate change impacts.

Furthermore, increased absenteeism due to extreme weather events may also intensify the impacts of lower productivity, particularly because women may be more likely to be absent due to (having) disproportionate care duties.

One solution to counteract such negative effects would be to improve the cooling of factories, however such systems are costly to maintain. While cooling systems do exist in some factories, the effectiveness of fans and ventilation systems can be influenced by outside temperatures. Given the decreasing average profit margins for suppliers in Bangladesh (Anner 2018) that existed prior to the COVID-19 pandemic, and the significant economic repercussions of the pandemic on the sector in Bangladesh, the likelihood that cooling systems will offer a significant solution to offset the impact of climate change in the workplace remains uncertain. In addition, most cooling systems are energy intensive to operate and would further contribute to the significant environmental footprint of the sector.

Additionally, other suppliers in the value chain, often small- and medium-sized enterprises (SMEs), have even more difficulties in making such investments, as well as in meeting social and environmental compliance/standards more generally. SMEs' struggle to access capital is augmented in emerging economies

(Yoshino and Taghizadeh-Hesary 2017), where they can be responsible for a significant part of the production (ILO 2019c).

Another solution would be to improve productivity in factories. Productivity in the garment sector throughout the region is notably lower than productivity in other sectors (ILO 2021). While there is significant potential to improve in this area, improving productivity alone cannot address the intersecting impacts from climate change, such as increased absenteeism resulting from excessive rainfall, cyclones or other non-heat related weather events, and productivity losses that could be sustained throughout the production and manufacturing supply chain (damage to agriculture, buildings, etc.) due to extreme weather events. Furthermore, given the significant negative impacts that violence and harassment have on productivity, as outlined by the CARE International (2017) report cited above, in order to be successful, efforts to improve productivity need to take into account the violence and harassment – particularly sexual violence and harassment – that already exist in the sector.

While climate change alone is not the cause of gender-based violence and harassment, climate change can lower productivity and increase work intensity, which are factors associated with increased violence and harassment in the garment sector. The consequences resulting from these intersecting issues suggest that unless meaningful action is taken to curb the effects of climate change and violence and harassment – both individually and together – the garment sector in Asia could face additional challenges in remaining competitive and viable in the future.

Emerging issues and the need for additional research

In sum, there is growing evidence that suggests climate change will have a negative impact on both workers and factories within the garment sector in Asia. One potential impact of such changes could be workers facing increased risk of exposure to violence and harassment, particularly gender-based violence and harassment, due to falling levels of productivity.

While important efforts to address both harassment and productivity, such as the Better Work programme and others, are already prevalent throughout the sector, increased negative impacts as a result of climate change and gender inequalities will intensify the root causes of these issues.

Furthermore, the COVID-19 pandemic has dramatically impacted the garment sector. In many cases there have been decreases in orders for factories and in working hours for workers. This has led to negative socio-economic impacts such as a loss of income, increased food insecurity and increased unpaid care duties for women (CARE International 2020).

Also significant is the capacity of the sector to address these issues at the second and third tiers of production, including small factories and home-based (often informal) units where in addition to working with dangerous chemicals (often without adequate protection), workers frequently face intense heat. The impacts of the combination of climate change and violence and harassment – particularly gender-based violence and harassment – in the garment sector have not been studied, but it should be considered in order to achieve climate change mitigation and adaptation goals and ensure a just transition for all towards environmentally sustainable economies and societies in countries such as Bangladesh.

In order to combat these intersecting issues, it is important for all parties to prioritize efforts to slow and reduce climate change and to consider the gendered impact that climate change will have on garment workers throughout the region, particularly as the effects of climate change can exacerbate existing gender inequalities, resulting in more negative impacts for women.

While this working paper seeks to highlight possible impacts of climate change on gender-based violence and harassment in the garment sector, further research and dialogue is needed to better understand the potential risks as well as the potential solutions to these serious issues.

Specific attention should be paid to the following:

In the short term, research and dialogue should focus on addressing purchasing practices and power imbalances that are currently prevalent throughout garment sector. Purchasing practices such as inaccurate order forecasting, price pressures, inadequate lead time and disproportionate financial risk and liability for suppliers contribute towards increased work intensity and, as a consequence, increased levels of violence and harassment for workers. These practices also limit the capital that suppliers have available for investment into improved environmental sustainability. Therefore, due in part to the workplace impacts and strain that purchasing practices put on workers and suppliers, progress towards improved social and environmental sustainability within the sector remains limited. The negative impacts of this have become increasingly visible during the COVID-19 pandemic, which has further raised the issue of the sustainability of purchasing practices within the garment and textile sector, and has resulted in renewed support for conversation regarding what investments, policies and standards should be in place as the sector recovers. Consideration of how purchasing practices can help support improved working conditions and incentivize cleaner production and environmental compliance should be key considerations in this dialogue.

In order to address the root causes of violence and harassment in the garment sector, specific attention should be directed towards addressing existing gender gaps in the sector and in society. Widespread attitudes and behaviours throughout the sector undermine gender equality, leading to decreased productivity

for and increased violence against women workers. Addressing the issues of violence and harassment – along with other gender gaps such as unpaid care work and parental leave; equal pay; and women’s voice, representation and leadership – would enable improved gender relations in both society and the workplace. Key measures to achieve this goal include pursuing gender-responsive and effective social dialogue and policies that draw guidance from ILO instruments such as the Violence and Harassment Convention, 2019 (No. 190).

This is particularly important given the significant impacts of COVID-19 on the sector’s factories and women and men workers (ILO, Better Work, and Cornell University 2020), as well as the broader gendered impacts that the pandemic is having on women through increases in care work and exposure to various types of violence (ILO 2020). Given that workers within the garment sector are predominately women, it is essential that plans to facilitate recovery and enhance long-term sustainability in the sector are correspondingly gender-responsive.

Another important area of focus for research and dialogue should be on addressing the climate change emergency, including the garment sector’s contribution to it. Climate change is a global problem that requires social dialogue and collective action. The Paris Climate Agreement of limiting warming to 2°C compared to pre-industrial levels offers one of the most viable paths forward. Adhering to the Agreement will require economic and social transformation, reduction of greenhouse gas emissions, and a transition to more carbon-neutral jobs and industries in line with the ILO Guidelines for a Just Transition (2015) and the Climate Action for Jobs initiative. Given its significant role in contributing high levels of greenhouse gas emissions, water pollution and energy consumption, the garment industry should focus on “greening” the sector through policy enforcement and new technologies, such as waste-water recycling and energy-saving devices.

However, while these changes have the potential to offset some of the impacts of climate change, and therefore potentially reduce violence and harassment in the world of work, in the long run, the sector will ultimately require transformation to more sustainable and regenerative models.

References

ActionAid International. 2019. "80% of Garment Workers in Bangladesh Have Experienced or Witnessed Sexual Violence and Harassment at Work", news release, 10 June.

Adhvaryu, Achyuta, Namrata Kala, and Anant Nyshadham. 2018. "The Light and the Heat: Productivity Co-Benefits of Energy-Saving Technology", National Bureau of Economic Research Working Paper Series No. 24314.

Al Mamun, Mafuz, Kausar Parvin, Marat Yu, Jessica Wan, Samantha Willan, Andrew Gibbs, Rachel Jewkes, and Ruchira Naved. 2018. "The HERrespect Intervention to Address Violence Against Female Garment Workers in Bangladesh: Study Protocol for a Quasi-experimental Trial." *BMC Public Health* 18: 512.

Anner, Mark. 2018. "Binding Power: The Sourcing Squeeze, Workers' Rights, and Building Safety in Bangladesh since Rana Plaza", Penn State Center for Global Workers' Rights Research Report.

Better Work. 2019a. "Sexual Harassment at Work: Insights from the Global Garment Industry", Better Work Thematic Brief.

———. 2019b. *Annual Report 2019: An Industry and Compliance Review – Vietnam*.

———. n.d. "2019 Non-Compliance Information for the 2020 Annual Report", available at: <https://annual-report.betterwork.org/2019/data-portal/ISO3/country/Bangladesh>.

CARE International. 2017. "I know I cannot quit." – *The Prevalence and Productivity Cost of Sexual Harassment to the Cambodian Garment Industry*.

———. 2020. *Garment Worker Needs Assessment during COVID19*.

Cruz, Adrienne, and Sabine Klinger. 2011. "Gender-Based Violence in the World of Work: Overview and Selected Annotated Bibliography", ILO Bureau for Gender Equality Working Paper No. 3.

Eckstein, David, Marie-Lena Hutfils, and Maik Wings. 2019. "Global Climate Risk Index 2019: Who Suffers Most from Extreme Weather Events? – Weather-Related Loss Events in 2017 and 1998 to 2017", Germanwatch Briefing Paper.

EMF (Ellen Macarthur Foundation). 2017. *A New Textiles Economy: Redesigning Fashion's Future*.

FWF (Fair Wear Foundation). 2018. *Breaking the Silence: The FWF Violence and Harassment Prevention Programme*.

Gibbs, Andrew, Rachel Jewkes, Samantha Willan, Mahfuz Al Mamun, Kausar Parvin, Marat Yu, and Ruchira Naved. 2019. "Workplace Violence in Bangladesh's Garment Industry." *Social Science & Medicine* 235.

HRW (Human Rights Watch). 2019. "Paying for a Bus Ticket and Expecting to Fly": *How Apparel Brand Purchasing Practices Drive Labor Abuses*.

ILO. 2015. *Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All*.

———. 2019a. *Working on a Warmer Planet: The Impact of Heat Stress on Labour Productivity and Decent Work*.

———. 2019b. *Safety and Health at the Heart of the Future of Work: Building on 100 Years of Experience*.

———. 2019c. "The Future of Work in Textiles, Clothing, Leather and Footwear", ILO Sectoral Policies Department Working Paper No. 326.

———. 2020. "Gendered Impacts of COVID-19 on the Garment Sector", ILO Brief.

———. 2021. *Productivity interventions available to garment factories in Asia: A mapping study*.

ILO, Better Work, and Cornell University, School of Industrial and Labour Relations. 2020. "The Supply Chain Ripple Effect: How COVID-19 Is Affecting Garment Workers and Factories in Asia and the Pacific", ILO Research Brief.

Kjellstrom, Tord, David Briggs, Chris Freyberg, Bruno Lemke, Matthias Otto, and Olivia Hyatt. 2016. "Heat, Human Performance, and Occupational Health: A Key Issue for the Assessment of Global Climate Change Impacts." *Annual Review of Public Health* 37 (1): 97–112.

Mares, Dennis M., and Kenneth W. Moffett. 2016. "Climate Change and Interpersonal Violence: A 'Global' Estimate and Regional Inequities". *Climatic Change* 135 (2): 297–310.

McKinsey & Company and BOF (Business of Fashion). 2020. *The State of Fashion 2020: Coronavirus Update*.

Morris, Jo, and Jane Pillinger. 2018. *Violence and Harassment Against Women and Men in the Global Supply Chain*. Fair Wear Foundation.

Naeem, Farria, and Christopher Woodruff. 2015. "Managerial Capital and Productivity: Evidence from a Training Program in the Bangladesh Garment Sector", International Growth Centre Policy Brief.

Naved, Ruchira, Mahfuz Al Mamun, Kausar Parvin, Samantha Willan, Andrew Gibbs, Marat Yu, and Rachel Jewkes. 2018. "Magnitude and Correlates of Intimate Partner Violence Against Female Garment Workers from Selected Factories in Bangladesh." *PLOS ONE* 13 (11).

Niinimäki, Kirsi, Greg Peters, Helena Dahlbo, Patsy Perry, Timo Rissanen, and Alison Gwilt. 2020. "The Environmental Price of Fast Fashion." *Nature Reviews: Earth and Environment* 1: 189–200.

Rourke, Emily L. 2014. "Incentive Structure, Verbal Abuse, Productivity and Profits in Garment Factories?", Better Work Discussion Paper Series No. 15.

Sebastio, Filippo. 2018. "Climate Change, Public Health, Women's Empowerment, and Supplier Performance in Bangladesh", *BSR Blog*, 12 March.

Somanathan, E., Rohini Somanathan, Anant Sudarshan, and Meenu Tewari. 2018. "The Impact of Temperature on Productivity and Labor Supply: Evidence from Indian Manufacturing", Becker Friedman Institute Working Paper No. 2018-69.

Soviadan, Mawussi Kossivi, Egnonto Mitowanou Koffi-Tessio, Anselm Anibueze Enete, Noble Jackson Nweze. 2019. "Impact of Climate Change on Cotton Production: Case of Savannah Region, Northern Togo." *Agricultural Sciences*, Vol.10 No.7.

United Nations Office for Disaster Risk Reduction and the Centre for Research on the Epidemiology of Disasters. 2020. *Human Cost of Disasters: An Overview of the Last 20 Years 2000–2019*.

UN Women. 2014. "Climate Change, Disasters and Gender-Based Violence in the Pacific", UN Women Brief.

United Kingdom, House of Commons, Environmental Audit Committee. 2019. *Fixing Fashion: Clothing Consumption and Sustainability*, HC 1952.

USAID (United States Agency for International Development). 2015. "Climate Change Information Fact Sheet: Bangladesh".

Vaughan-Whitehead, Daniel, and Luis Pinedo Caro. 2017. "Purchasing Practices and Working Conditions in Global Supply Chains: Global Survey Results", ILO INWORK Issue Brief No. 10.

World Bank. n.d. "Bangladesh: Climate Data – Projections", World Bank Climate Change Knowledge Portal. Available at: <https://climateknowledgeportal.worldbank.org/>. Accessed 25 August 2020.

Yoshino, Naoyuki, and Farhad Taghizadeh-Hesary. 2017. "Solutions for Small and Medium-Sized Enterprises' Difficulties in Accessing Finance: Asian Experiences", Asian Development Bank Institute Working Paper No. 768.

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► Advancing social justice, promoting decent work

The International Labour Organization is the United Nations agency for the world of work. We bring together governments, employers and workers to improve the working lives of all people, driving a human-centred approach to the future of work through employment creation, rights at work, social protection and social dialogue.

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