



Evidence on Male and Female Employment Status (in Largescale Infrastructure Projects) and VAWG

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Query: What is the evidence on the relationship between male and female employment status (in largescale infrastructure projects) and violence against women/girls in the domestic and public sphere?

1. Overview

This document provides a three-day rapid review of the evidence on the relationship between male and female employment status and violence against women/girls (VAWG) in the domestic and public sphere. It includes a brief overview (Section 1), methodological description and limitations (Section 2), evidence from the domestic sphere (Section 3), and public sphere (Section 4). It focuses on the evidence from largescale infrastructure projects, but briefly considers some of the wider literature on the relationship between male and female employment status and VAWG in the domestic sphere (Section 3.3).

Key observations from the evidence review include:

- **Overall, there is limited evidence on the relationship between employment status and VAWG in largescale infrastructure**, in both the domestic and public sphere. Evidence consists largely of a few small-scale ethnographic and qualitative studies, alongside documented examples of high-profile cases of safeguarding abuses. There is particularly limited evidence on violence against the most vulnerable groups, such as recent migrants and adolescent girls. Harassment and abuse of men, boys and children tends to be even more underreported (not a focus of this query).
- **The broader evidence (not infrastructure-specific) suggests that the link between female employment status and intimate partner violence (IPV) is complex and varies by context.** In contexts of high poverty and gender inequities, some studies show that women are at increased risk of physical partner violence in the short-term (Krishnan et al, 2010). There is also some rigorous evidence based on household surveys from 30 different countries that violent backlashes to changes in female employment status are more likely in areas with a high level of acceptance of wife-beating (Cools and Kotsadam, 2017). In the longer-term, the evidence suggests that women's employment is an important strategy for reducing violence in the domestic sphere (Heise, 2012).
- **Similarly, global studies show that IPV is more likely when men face difficulties in finding or keeping a job** and decreases when they no longer face such challenges. However, there is a complex relationship between male employment and VAWG and therefore interventions should include gender-transformative components to address norms around violence and household decision-making.
- **The evidence from large-scale infrastructure projects on the relationship between employment status and VAWG in the domestic sphere is extremely limited.** Most evidence is based on small-scale ethnographic studies or is from the United States, and therefore caution should be exercised applying it to other contexts. This evidence suggests **male infrastructure**

workers (particularly construction workers) are a high-risk occupational group for problem drinking and have higher rates of perpetrating IPV. World Bank (2018) guidance also refers to the problem of large influxes of young, single male workers associated with infrastructure projects and how this can result in jealousy, changing household power dynamics, and abusive behaviour in the home, although no research is cited. No evidence could be found from the infrastructure sector to show that increased male employment leads to a reduction in IPV.

- **There is also a gap in the evidence on the relationship between female employment status in largescale infrastructure projects and IPV.** Two studies of women workers in the infrastructure sector were found from India and Bangladesh, both of which highlighted **increased physical and economic violence in the domestic sphere**, partly due to male partners struggling with their 'masculine identity' and norms that women workers in the construction sector are 'impure' and 'sexually available' (Parry, 2014; Choudhury and Clisby, 2018).
- In the public sphere, the evidence suggests that **women working in large-scale infrastructure projects are vulnerable to workplace harassment and abuse, exacerbated by the traditionally male working environment.** Studies are largely based on women construction workers in Bangladesh, Nepal, India, who describe being economically exploited, verbally abused, and sexually harassed by supervisors, contractors and co-workers (Choudhury, 2013; IMC Worldwide, 2017; Bowers, 2019).
- **Another growing concern is the increased risk of sexual exploitation, abuse and harassment (SEAH) associated with large infrastructure projects,** as noted in DFID's new safeguarding tool on SEAH in infrastructure. Evidence suggests that risks are exacerbated when there are influxes of predominantly male workers, often employed informally without formal contracts or background checks. Related factors such as alcohol and drug use, more demand for commercial sex work and inflated prices for transactional sex can also increase the risk of SEAH (see example of SEAH by construction workers during a World Bank-funded road project in Uganda in Section 4.2).
- **Large-scale infrastructure projects are also associated with an increased risk of trafficking and modern slavery for men, women and children,** particularly during the construction phase due to the complexities of its supply chains. In South Asian countries, bonded labour has been well documented in construction and domestic brick production despite being banned in Nepal in 2002 (Pattison and Kelly, 2015). Sex trafficking and forced labour are also associated with infrastructure projects, with the 2015 earthquake increasing vulnerability to trafficking (US Department of State, 2018; Verité, 2016).

2. Methodology and evidence base

This query is based on rapid review of the key evidence on the relationship between employment status and VAWG in largescale infrastructure. Due to the lack of evidence in some areas (e.g. on the link between male employment status and VAWG), the desk review also consulted existing syntheses and evidence reviews on the broader literature beyond infrastructure projects.

Search strategy: Studies were identified through searches using Google and relevant electronic databases (PubMed, Science Direct, and Google Scholar) for priority sources. Key search terms included: employment, labour, income AND violence, abuse, harassment, exploitation, domestic violence, intimate partner violence, rape AND infrastructure, construction, transport.

Criteria for inclusion: To be eligible for inclusion in this rapid mapping, evidence had to fulfil the following criteria:

- **Focus:** Research, evaluations and studies of the relationship between male and female employment status and VAWG in the domestic and public sphere, focused on largescale infrastructure project but opened up to briefly consider the wider literature for Section 3.3
- **Time period:** 2000 – March 2019.
- **Language:** English.
- **Publication status:** publicly available – in almost all cases published online.
- **Geographical focus:** low and middle-income countries, but opened up to high-income countries in areas where evidence was lacking.

Overall, the evidence base on the relationship between employment status and VAWG in largescale infrastructure is limited, according to DFID's (2014) How to Note on Assessing the Strength of Evidence, i.e. moderate to low quality studies, medium size evidence body, low levels of consistency.

There is particularly limited data on the following areas:

- **Changing male employment status and VAWG** - there is no evidence apart from a few small-scale ethnographic studies.
- **Rigorous evidence from largescale infrastructure projects**, although there are some documented examples from the construction sector more broadly, as well as a few high-profile cases (e.g. the road construction project in Uganda).
- **Positive impacts, including reduced risk of VAWG** – most studies focus on the increased vulnerability to various forms of violence, but due to the lack of rigorous evidence it is not possible to assess whether there are changing levels of prevalence levels due to changes in male and female employment status in the infrastructure sector.
- **Limited data on the most vulnerable and marginalised groups**, such as new migrant workers, adolescent girls or young women. No information was available on violence against women with disabilities or sexual minorities.
- **Harassment and abuse of male workers, as well as young men and boys in public and domestic spheres.** This query focuses on violence against women and girls, but it should also be noted that men and boys can also be vulnerable to sexual harassment and abuse, as well as homophobic or transphobic violence, exacerbated by all-male living environment, and this tends to be underreported. This query has also not looked at the impact on violence against children.

3. Domestic sphere

3.1 Male employment status - Evidence from infrastructure projects

There is limited evidence on the relationship between male employment in largescale infrastructure projects and violence in the domestic sphere, although there is some evidence from the wider literature (not infrastructure focused) that partner violence can increase when men go from stable employment to experiencing difficulties.

Evidence on largescale infrastructure projects is largely from high-income countries, and therefore caution should be exercised when applying the findings to low and middle income countries and different cultural contexts. Evidence includes:

- **Surveys of workers in large-scale infrastructure projects show higher rates of perpetrating self-reported intimate partner violence**, compared to the general population. For example, a

study of 100 construction workers in California found a past-year prevalence rate of 26% - higher than the general population samples [figures not provided in the article]. Factors positively associated with elevated risk of IPV in the study included job strain, heavy alcohol use, interpersonal work conflict, normative beliefs,¹ and perceived workplace discrimination. Study participants were unionised workers, and the authors note that IPV perpetration may be even higher for non-unionised workers due to lower pay, absence of union contract protection, more hazardous working conditions, and poor or non-existent benefits (Cunradi et al, 2008).

- **Construction workers are a high-risk occupational group for problem drinking and associated partner violence.** For example, a survey with members of a large union representing 35,000 construction industry workers in Northern California found that approximately 17% of male workers were classified as problem drinkers. Male to female partner violence (violence perpetrated by a male partner) was twice as high among couples in which the male was a problem drinker compared to couples in which the male was not a problem drinker (34% vs. 17%). Similarly, rates of female to male partner violence (violence perpetrated by female partner) were significantly higher among couples in which the male was a problem drinker compared to couples in which the male was not a problem drinker (31% vs. 22%) (Cunradi et al, 2009).

There is also some evidence that the large influxes of male workers associated with infrastructure projects can increase domestic violence, as a result in shifts in power dynamics within households. The World Bank's (2018) Good Practice Note on *Addressing GBV in Investment Project Financing involving Major Civil Works* notes that "Male jealousy, a key driver of GBV, can be triggered by labour influx on a project when workers are believed to be interacting with community women. Hence, abusive behaviour can occur not only between project-related staff and those living in and around the project site, but also within the homes of those affected by the project" (p.1).

3.2 Female employment status - Evidence from infrastructure projects

There is almost no evidence on whether women working in large scale infrastructure projects are more likely to experience violence in the domestic sphere, although there is evidence of sexual harassment and exploitation by co-workers or supervisors (see Section 4.1). This query was only able to find a few studies from the infrastructure sector of research on women workers' changing experience of domestic or intimate partner violence, both of which highlighted increased levels of violence by male partners, including physical violence and economic violence (withholding money) – see case studies below.

Case studies of women workers

Bhilai Steel Plant, India: Ethnographic research with women workers for the large public sector Bhilai Steel Plant observed violence, harassment and exploitation against women workers, both in the private and public sphere. While the regular workforce is almost exclusively male, approximately a third of contract labourers are women. Women workers are often the subject of sexual harassment and innuendo, which often provoked jealousy and violence by their male partners. The study includes several examples of cases of intimate partner violence which have resulted in murder or workers being fired. The study also finds that women workers are vulnerable to sexual harassment and exploitation from supervisors, contractors and owners. Female-headed households with children are particularly at risk of sexual and economic exploitation by men in positions of power and authority. The research also highlights social norms that women working in the construction sector are

¹ Normative beliefs included perceived co-worker, peer, and family member approval/disapproval of and/or involvement in IPV behaviours

perceived to be 'sexually available' and impure, reinforced too by class and caste discrimination (Parry, 2014).

Sylhet, Bangladesh: Ethnographic research looked at constructions of masculinities among and within households of women and men construction workers. It found that male partners of women construction workers often struggled to 'uphold their masculine identity' which resulted in increased levels of intimate partner violence (Choudhury and Clisby, 2018).

3.3 Global evidence (not infrastructure specific)

The relationship between female employment status and violence in the domestic sphere is complex and varies by social context and other country-level factors (Fulu and Heise, 2015). One of the most comprehensive studies, based on multi-level analysis of Demographic and Health Survey (DHS) data for 580,000 women from 30 different countries in Sub-Saharan Africa, concluded that violent backlashes to women's employment are more likely in contexts where intimate partner violence is accepted. The association of abuse with employment is twice as strong in areas with a high level of acceptance of wife-beating (Cools and Kotsadam, 2017).

Studies of changing female employment status show that women can be at increased risk of physical partner violence in the short-term, particularly in contexts of poverty and gender inequities. A study² of 744 married women, aged 16-25, in low-income communities in Bangalore, India found that women who were unemployed at the outset and became employed during the study period faced 80% higher odds of violence than women whose employment status remained unchanged (Krishnan et al, 2010).

Changes in male employment status can also change the risks of partner violence, increasing when men face difficulties in finding or keeping a job and decreasing when they no longer face such challenges. The earlier Bangalore study found that women whose husbands went from being in stable employment to experiencing difficulties finding employment had 1.7 times the odds of violence, as compared to women whose husbands maintained their stable employment. The study "points to the complex challenges of violence prevention, including the need for interventions among men and gender transformative approaches to promote gender-equitable attitudes, practices and norms among men and women." (Krishnan et al, 2010: 136).

Although violence can increase in the short-term, research suggests that in the longer-term **"expanding women's access to waged employment is an important long-term strategy for empowering women and reducing violence"** (Heise, 2012: 16). For example, a study using complex econometric techniques from the US concluded that 10% of the decline in partner violence over the period 1990-2003 could be explained by an improvement in local labour market conditions for women over this same period (Aizer, 2010).

4. Public sphere

4.1 Violence and harassment against women workers in infrastructure projects

Women employed in large-scale infrastructure projects are vulnerable to workplace sexual harassment and abuse, exacerbated by the traditionally male working environment. Research with women workers in large infrastructure projects has highlighted high levels of workplace harassment, for example:

² A prospective study with data collected at enrolment, 12 and 24 months.

- **Sylhet city, Bangladesh:** Female construction workers described being economically exploited, verbally abused, and sexually harassed, mostly by co-workers or construction supervisors. For example, one female construction worker said, “It becomes more problematic for us when the main men [raj mistry] want to make sexual advances. Since their work is very important, neither sarders nor contractors say anything to them.” (Choudhury, 2013: 893)
- **Manahora, Nepal:** There are high levels of workplace harassment, particularly economic exploitation, against women workers in the infrastructure sector, according to a recent DFID-funded study looked at the interaction between women’s economic activity and violence against women and girls in Myanmar, Nepal and Pakistan. It included research in Manohara – an area of Nepal inhabited by large numbers of construction workers. Women construction workers described being paid less than male masons for the same work and fearing harassment if they complained. In a few situations, the contractors had tried not to pay the women construction workers for their work, but the women had joined together and confronted these contractors (IMC Worldwide, 2017).
- **Kerala State, India:** A survey of 150 women construction workers (both permanent and seasonal) found that the most common type of harassment is ‘abusing’³ (37% of women workers) followed by ‘eve teasing’⁴ (23%), and physical beating (4.6%). 1 in 5 (21%) of women said the harassment affected their behaviour towards other co-workers and family members (Hari Priya, date unknown).
- **Bangaluru, India:** Ethnographic research in the construction sector⁵ found the women workers were largely perceived as ‘supplemental labour’ to their husbands or male kin, who often negotiate and are paid the women’s wages. All employers used ‘maistri’ (middle-men), who were frequently accused of sexual exploitation of women workers. The maistris also intervened in ‘domestic disputes’, including domestic violence and sexual harassment (Bowers, 2019).

4.2 Sexual exploitation, abuse and harassment (SEAH)

Large infrastructure projects often involve an influx of predominantly male workers, exposing women and girls living in the community and providing services (e.g. traders, sex workers) to risks of sexual exploitation and violence (Fraser et al, 2017). For example, research in largescale transport infrastructure projects in Cambodia, China, Lao PDR and Viet Nam found that construction workers often developed relationships with local adolescent girls and young women. There was also an increased presence of sex workers, often leading adolescent boys and community men to engage in high-risk sexual behaviour (Gardsbane, 2008). Large and more remote infrastructure programmes will include women who travel to live in or around the camps, who are potentially highly vulnerable because of their lack of a local support network.

Construction workers are often employed informally without formal contracts or background checks, increasing the risk of SEAH. DFID’s new safeguarding tool on SEAH in infrastructure project notes that the scale and absorptive capacity of the workforce are critical factors to consider when assessing SEAH risks. For example, the World Bank (2016) have noted that an influx of 100 workers in a large urban area would generally have a low impact, while the same number in a remote rural area, or one where Indigenous Peoples live or where there are other factors at play (cultural, duration of works), is more likely to have a high impact.

³ No details provided on type of ‘abusing’ – i.e. whether verbal, physical or sexual

⁴ Eve teasing refers to unwanted sexual remarks or advances by a man to a woman in a public place

⁵ Focusing on two sites – (1) a four story office block; and (2) a large 70-acre university and hospital complex in 2015-2016

The risk of SEAH is also elevated at points of corruption in infrastructure programmes, for example, collection of user fees and trade points such as truck stops or border posts are typically points at which risks of corruption are heightened. Vulnerable persons may be particularly at risk of SEAH at these corruption points (DFID, 2019). Research on the gendered nature of corruption has highlighted that “the currency of corruption is frequently sexualized—women and girls are often asked to pay bribes in the form of sexual favours” (Hossain and Musembi, 2010: 5).

Sex work and increased use of drugs and alcohol are often associated with a mobile and temporary workforce, such as truckers and construction workers, which can further exacerbate the risk of VAWG (USAID, 2015; Gardsbane, 2008).

Workers on infrastructure projects are predominantly young, single males who are separated from their family or spouse, and are often outside their ‘habitual sphere of social control’ (World Bank, 2016). Where the presence of law enforcement is low, as in rural and remote areas, there is a higher risk of SEAH, particularly for younger women, girls and boys (World Bank, 2016).

Reports of SEAH during the Kamwenge-Kabarole road construction project, Uganda

Reports of SEAH by construction workers during a World Bank-funded transport project in Uganda led to the bank cancelling the project, and a review of the Bank’s efforts to tackle GBV. A report by Joy for Children (2015), the Ugandan NGO, exposed sexual abuse being carried out by road workers:

- **Sexual harassment and abuse of girls** as they travel to and from school, as well as verbal and physical abuse. The report noted that just within one school term, 9 girls from the same secondary school dropped out because they had become pregnant from road construction staff.
- **Sexual assault and abuse of adolescent girls helping with food vending**, with many girls helping their mothers with small-scale businesses for construction workers. Girls were particularly vulnerable at the night food market, and a new street operating from 8pm.
- **Child sexual exploitation** also reported increased, with more demand for commercial sex as well as inflated prices for transactional sex. The cost for sex workers reportedly increased from an average of 30,000 to 80,000 Ugandan shillings, with school girls being offered between 5,000 and 10,000 Ugandan shillings for sex, or being attacked when they refuse. Girls also reported that they were being recruited by third parties to provide sex for road construction supervisors.

4.3 Trafficking and modern slavery

There is a growing body of evidence showing that large-scale infrastructure projects are associated with a rise in modern slavery and human trafficking for men, women and children, particularly during the construction phase. The construction industry is particularly at risk of trafficking and modern slavery due to the complexities of its supply chains (Goncalves, 2017). Recent high profile cases of men, women and children trafficked during large infrastructure projects and to work in the construction industry include the 2022 football World Cup in Qatar, including new stadiums, roads, hotels, airport, metro and railway system (Human Rights Watch, 2014)

The links between bonded labour and construction, particularly in South Asian countries such as Nepal, India and Pakistan, are well documented (Finn, 2008). Bonded labour is a form of modern ‘debt’ slavery, whereby a person is forced to work to pay off a debt. They are often tricked and trapped into working for little or no pay, with no control over their debt, and the debt can be passed down generations. In Nepal, bonded labour was legally abolished as part of the 2002 Bonded Labour Prohibition Act; however, the practice persists in a number of regions of the country and is

associated with a number of sectors including construction and domestic brick production (Pattison and Kelly, 2015).⁶

In Nepal, women and girls are subjected to sex trafficking in Nepal, India, the Middle East, Asia, and Sub-Saharan Africa. **Nepali men, women, and children are subjected to forced labour** in Nepal, India, the Middle East, and Asia including in large-scale infrastructure projects, through construction, factories, and mines. The 2015 earthquake destroyed many Nepalis' homes and livelihoods, increasing their vulnerability to trafficking (US Department of State, 2018; Verité, 2016).

⁶ <https://accountabilityhub.org/country/nepal/>

5. References

- Aizer, A. (2010) 'The Gender Wage Gap and Domestic Violence', *American Economic Review*, 100, 1847–1859.
- Bowers, R (2019) 'Navigating the City and the Workplace: Migrant Female Construction Workers and Urban (Im)Mobilities', *Global Labour Journal*, 2019, 10(1): 20-36.
- Choudhury, T (2013) 'Experiences of women as workers: a study of construction workers in Bangladesh', *Construction Management and Economics*, 31:8, 883-898.
- Choudhury, T and Clisby, S (2018) 'Masculinity in Transition or Patriarchy Reasserted? A Study of Construction Workers in Sylhet, Bangladesh', *Studies on Home and Community Science*, 11:2, 125-139.
- Cools, S. and Kotsadam, A. (2017) 'Resources and Intimate Partner Violence in Sub-Saharan Africa'. *World Development*, Vol. 95, pp. 211–230
- Cunradi C, Ames G, and Moore R (2008) 'Prevalence and correlates of intimate partner violence among a sample of construction industry workers', *Journal of Family Violence*. 23:101–112.
- DFID (forthcoming) *Sexual Exploitation, Abuse and Harassment in Infrastructure Projects – Safeguarding Tool*, London: DFID (forthcoming).
- Finn, D (2008) 'Bonded Labour in India' in Human Rights and Contemporary Slavery. <http://www.du.edu/korbel/hrhw/researchdigest/slavery/slavery.pdf>
- Fulu, E and Heise, L (2015) *State of the Field of Research on Violence against Women and Girls*, What works to prevent violence against women and girls Evidence Review.
- Gardsbane, D (2008) *Findings from the Field: HIV Education in the Transport Sector: Focus on Cambodia, China, Lao PDR and Viet Nam*. Report for the World Bank East Asia and Pacific Region.
- Goncalves, T (2017) 'Tackling modern slavery in the construction industry', World Construction Network, 5 May 2017, <https://www.worldconstructionnetwork.com/features/tackling-modern-slavery-in-the-construction-industry>
- Hari Priya, S (date unknown) *Violence against Women Construction Workers in Kerala, India*. Paper prepared for the Global Network for Women's Advocacy and Civil Society
- Hossain, N and Musembi, C (2010) *Corruption, Accountability and Gender: Understanding the Connections*, New York: UNIFEM and UNDP.
- Human Rights Watch (2014) World Report 2014: Qatar <https://www.hrw.org/worldreport/2014/country-chapters/qatar>
- IMC Worldwide (2017) *Women, Work and violence in Myanmar, Nepal and Pakistan*, London: IMC Worldwide.
- Joy for Children (2015) *The Impact of the World Bank Funded Kamwenge-Kabarole Road Construction Project on Children*, Bank Information Center (BIC)
- Krishnan, S. et al. (2010) 'Do changes in spousal employment status lead to domestic violence? Insights from a prospective study in Bangalore, India', *Social science and medicine*, 70(1), 136–43.
- Parry, J. (2014) 'Sex, Bricks and Mortar: Constructing Class in a Central Indian Steel Town'. *Modern Asian Studies*, 48(5): 1242–1275.

Pattison, P and Kelly, A (2015) 'How Nepal is trying to solve its blood brick problem', *The Guardian*, 12 February 2015.

USAID (2015) *Toolkit for Integrating GBV into Infrastructure Projects*, Washington D.C.: USAID <https://www.usaid.gov/documents/1865/building-safer-world-toolkitintegrating-gbv-prevention-and-response>

US Department of State (2018) *Trafficking in Persons Report: Nepal Country Profile*, Washington DC: US Department of State.

Verité (2016) *Labor Brokerage and Trafficking of Nepali Migrant Workers*, Amherst: Verité Fair Labor Worldwide

World Bank (2018) *Good Practice Note: Addressing GBV in Investment Project Financing involving Major Civil Works*, Washington DC: World Bank.

World Bank (2016) *Managing the Risks of Adverse Impacts on Communities from Temporary Project Induced Labour Influx*, Washington DC: World Bank.

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