

# WOMEN'S LABOUR RIGHTS IN AN ERA OF DIGITALISATION

Regional Analysis of the 2023-2025 Women Organising Workers Feminist Participatory Action Research Cycle 'Karon nako nasayran kung paunsa ang digitalisation sa akong kinabuhi karon. Tinuod, ang mga apps nga naa sa akoang phone mao'y magtakda kung unsa akong mabuhat o dili mabuhat sa tibuok adlaw. Pirmi nako gina-check ang GC (group chat) taga oras kung malista ko sa mga on-call nga pareport-on sa duty sa sunod adlaw. Kung naa ko sa listahan, malipay ko. Kung wala, minghoy oi.'

'I am just realising how digitalisation is in my life right now. It's true, the apps on my phone determine what I am going to do or not do for my whole day. I keep checking the GC (group chat) every hour if I am listed among the on-call workers who will report for duty the following day. If I'm on the list, I'm happy. If I'm not, I'm miserable.'

- Woman warehouse worker, Philippines

#### **ABBREVIATIONS**

AAC Autoclaved Aerated Concrete

**APWLD** Asia Pacific Forum on Women, Law and Development

**CFSWF** Cambodian Food and Service Workers' Federation

**EHR** Electronic Health Record

**EMR** Electronic Medical Record

**FGD** Focus Group Discussion

**FNU** Filipino Nurses United

**FPAR** Feminist Participatory Action Research

**GSBI** Gabungan Serikat Buruh Indonesia

**iHOMIS** Integrated Hospital Operations and Management Information System

**ILO** International Labour Organization

**JELI** Just Economy and Labour Institute

**KDWU** Korea Domestic Workers' Union

NGO Non-Government Organisation

NSSF National Social Security Fund (Cambodia)

**OSH** Occupational Safety and Health

**PPE** Personal Protective Equipment

**RMG** Ready-made Garments

**SRA** Southern Riders Association

**UN** United Nations

**UN Women** United Nations Entity for Gender Equality and the Empowerment of Women

**WOW** Women Organising Workers (programme)

# **Executive Summary**

Across Asia and the Pacific, digitalisation is reorganising work through platforms, machines and data systems, thus concentrating power upwards into corporations and shifting risks onto women workers. This cements a system that keeps wages low, erodes protections and makes organising harder. States, rather than acting as guarantors of rights, increasingly serve as facilitators of capital—enabling corporations through legal loopholes and permissive worker classifications, deregulation and incentives that privilege profit over justice. Additionally, the sharp decline in collective bargaining power of unions weakens trade unions' leverage, especially that of women workers, shrinking their capacity to set wages, win protections and influence policy.

These transformations deepen the subordination of women and entrench the feminisation of poverty in the digital era. Grounded in the lived experiences of women resisting these changes, this regional analysis draws on Feminist Participatory Action Research (FPAR) led in seven countries—Bangladesh, Cambodia, India, Indonesia, the Philippines, the Republic of Korea and Thailand—to highlight how platformisation and automation intensify employer control while eroding women workers' rights and voice. At the same time, the findings underscore how women are harnessing their lived experience and collective organising to resist precarity, expose exploitation and demand structural change.

The FPAR findings reveal a shared pattern across sectors and countries: platforms and employers gain more control, while women workers have less voice and almost no recourse. In food and delivery work, platforms dictate access to orders, wages, penalties and suspensions, while costs like fuel, data and safety gear are shifted onto women riders. In the Republic of Korea's paid domestic work platforms, opaque matching and rating systems systematically exclude women workers from fair job opportunities, cutting their income through arbitrary ratings and biased customer complaints. In express-delivery warehouse in the Philippines, application logs and GPS tags feed directly into payroll and shift allocation, making even minor absences or mistakes grounds for losing income. In Philippine hospitals, nurses face electronic records and biometric systems that require repeated log-ins and duplicate entries, increasing surveillance without addressing chronic understaffing, forcing them into long hours of unpaid work. The technologies differ, but the outcome is consistent-more surveillance from above, less discretion for women workers on the ground and decisions tucked inside dashboards that they cannot easily see or challenge.

This pattern is just as stark in sectors undergoing automation and mechanisation. In Dhaka, Bangladesh, semi-automated processes in garment lines allow managers

to raise output expectations. However structured, on-the-clock training remains scarce. Women workers are forced to keep pace with machines they are denied the skills to operate. Factory managers label men as 'naturally suited' to automation and relegate women to lower-paid manual tasks. Without proper training, women must navigate complex systems through trial and error and often absorb punitive blame for mistakes. In Ahmedabad, India's construction industry, industrialised methods such as batching plants (automated concrete-mixing units), precast components (factory-moulded building parts assembled on site) and autoclaved aerated concrete or AAC blocks (lightweight, machine-cut bricks) reduce some manual tasks. But they push women construction workers into the lowest-paid support roles, reinforced by hiring practices like the jodi system that hide women's work and wages behind a male proxy. Hazards also persist—heat, strain, isolation at machine-paced stations and the stress of constant monitoring continue to define women's daily work.

These dynamics do not unfold on neutral ground, as entrenched hierarchies of gender, caste, class, migration status, indigeneity and the rural-urban divide shape who is trained, paid and heard. Yet, women workers are not passive—they resist digital-era patriarchy with collective power. In Thailand and Cambodia, women riders organise through the Southern Riders Association and the Cambodian Food and Service Workers' Federation (CFSWF), coordinating via LINE and Telegram groups to share updates and mobilise actions. JELI's FPAR in Thailand and CFSWF's FPAR in Cambodia document how platform companies' wage cuts sparked protests and ongoing organising by women riders. In Ahmedabad, India, women construction workers confront automation and gendered exclusion through collective meetings, demanding on-the-job training and engaging builders' associations and labour departments. In Davao, Philippines, women warehouse workers use group chats to verify shift listings and push back against data-driven staffing and surveillance systems that determine 'prio' (priority) shift allocation. Filipino nurses explicitly link understaffing, guaranteed rest time and patient safety, showing how tools meant for efficiency add to workloads while care remains overstretched. In Indonesia, women factory workers affiliated with GSBI also confront company-backed or "yellow" unions that sign collective agreements without workers' consent and block independent organising; through FPAR, they are reconnecting with independent GSBI structures to rebuild genuine worker representation and defend their rights.

This analysis organises women workers' realities into three interconnected themes: the spread of platform based labour; the effects of automation and mechanisation in women-intensive sectors; and the rise of digital surveillance and algorithmic control across platforms and non-platform settings. Further, this analysis offers recommendations rooted in women workers' demands.

Women workers demand that governments stop hiding behind loopholes and recognise them as workers, not 'partners' or 'independent contractors'. States must extend core labour protections: enforceable rules on data use and scheduling, a gender-responsive just transition for automation with paid training and redeployment, updated Occupational Safety and Health (OSH) standards for machine-paced and heat-exposed work, guaranteed childcare and safe sanitation and protection for organising in dispersed, app-managed jobs.

Confronting the extractive and profit-making practices of platform companies, women riders and warehouse workers demand an end to opacity. They insist that companies guarantee minimum earnings after expenses, provide transparent reasons and appeals for penalties and deactivation, disclose how allocation and scheduling systems operate and ensure real safety measures that do not punish women for refusing unsafe routes or night work.

In automation-heavy sectors, women garment and construction workers assert their right to on-the-clock technical training, childcare, safe transport and redeployment before new machines are rolled out. They call for an end to wage-hiding practices such as the jodi system, which routes wages through men and invisibilises women's labour. They demand that surveillance be limited strictly to genuine safety requirements, not expanded as a tool of discipline. Business associations cannot evade responsibility—they must put these issues squarely on their agendas and build skills pipelines in partnership with women workers, unions and training providers.

Unions and grassroots worker organisations are already reshaping the terrain. Women leaders organise among dispersed platforms and informal workers, bargain over technological changes, build legal and data expertise and open doors for migrant women. At the global level, grassroots women workers demand that United Nations (UN) bodies honour existing international instruments by setting binding standards on employment status in platform work, algorithmic management and gender-responsive transitions. They call for model provisions that can be enforced nationally, funding for women-centred re-skilling and gender-disaggregated monitoring to hold both states and corporations to account.

# Introduction

The world of work is undergoing one of its most dramatic transformations in decades, driven by digitalisation, automation, platform-based labour and algorithmic management. These processes are reorganising entire economies and eroding the foundations of decent work. Al-driven management already controls the labour of 427 million workers worldwide and 80 per cent of large employers now monitor individual productivity through digital tracking. Such practices fuel stress and injury through relentless surveillance and unrealistic targets.

Across Asia and the Pacific, this transformation is especially rapid. The region is home to nearly two billion workers, more than 60 per cent of whom are in informal or unprotected employment, making them highly vulnerable to digital forms of control.<sup>2</sup> Digitalisation has also accelerated the informalisation of work, sharply increasing precarious and contractual jobs, especially in the wake of the Covid-19 pandemic. This transformation has not affected all workers equally: its gendered impacts are stark. Women workers bear the heaviest costs. Far from being neutral, these technologies cement patriarchal divisions of labour, they funnel women into the lowest-paid and least secure roles, deepen wage gaps and strip away protections, while employers and platforms reap the benefits.

This wave of technological change is embedded in a neoliberal political economy that dismantles state protections, deepens inequality and pushes risks onto women workers. In Asia and the Pacific, these pressures take distinctive forms: weak regulatory frameworks, high dependence on informal labour markets and uneven access to technology mean that digitalisation amplifies existing structural inequalities. Deregulation, privatisation and a retreat of the state's protective role have shifted risks onto workers, especially women in precarious, low-wage jobs. The state now acts less as a guarantor of rights and more as a facilitator of digital capital, deepening systemic inequality. For women workers, this retreat multiplies vulnerability. Patriarchal norms and social stigmas are reinforced, leaving them with fewer protections, greater risks and less bargaining power in the very sectors where digitalisation and automation are advancing fastest.

These systemic shifts do not remain abstract. Women workers live them every day across sectors. In construction, mechanisation and automation confine women to the lowest-paid support roles, invisibilising their labour while the jodi recruitment

<sup>&</sup>lt;sup>1</sup> International Trade Union Confederation (ITUC). (2025). International Workers' Memorial Day 2025: Protecting Workers' Rights in the Age of Digitalisation and Artificial Intelligence. <a href="https://www.ituc-csi.org/">https://www.ituc-csi.org/</a> International-Workers-Memorial-Day-2025

<sup>&</sup>lt;sup>2</sup> International Labour Organization (ILO). (2024). *Asia-Pacific Employment and Social Outlook* 2024: *Navigating the Digital Transition of Work*. https://www.ilo.org/sites/default/files/2024-06/Asia-pacific-employment-social-outlook-2024%20%28web%29.pdf

system ties their wages to male partners. In manufacturing, machine-paced lines in garment and footwear factories accelerate targets, while digital attendance systems dictate pay and bonuses. In hospitals, electronic dashboards and claims software restructure the working day, cutting nurses' rest and care time and subjecting them to constant monitoring. In warehouses and delivery services, algorithms determine who gets 'priority' shifts and who waits unpaid, penalising women's bodily choices such as pausing for rest or care.

Across all these sites, companies promise training but withhold it or offer unpaid sessions that women with care responsibilities cannot attend. Wage gaps widen when employers label men's tasks as 'skilled' and women's as 'support'. Job insecurity deepens when a dashboard, rating or app update can curtail shifts without warning. Marketed as efficient and flexible, these technologies instead entrench poverty, drive debt, heighten harassment risks and strip women workers of protections, visibility and autonomy over their time, income and decision-making power.<sup>3</sup>

Confronting the reality that women workers bear the heaviest costs of digitalisation and automation requires more than a top-down policy or a tally of indicators. Real change begins with evidence rooted in the lives of the women most affected and with analysis that feeds directly into action. The Women Organising Workers (WOW) programme at the Asia Pacific Forum on Women, Law and Development (APWLD) takes this approach through Feminist Participatory Action Research (FPAR). FPAR places women workers at the centre: they frame the questions, collect and interpret the data transform findings into organising, negotiation and advocacy. This report draws on eight FPARs from seven countries:

- Aajeevika Bureau (India) working with migrant women in construction and the early mechanisation and automation of the sector;
- Cambodian Food and Service Workers' Federation CFSWF (Cambodia) working with women app-based food-delivery workers;
- Development Society (Bangladesh) working with women garment workers and automation in Mirpur, Dhaka;
- Filipino Nurses United FNU (Philippines) looking at datafication and automation in nursing and hospital systems;
- Gabungan Serikat Buruh Indonesia GSBI (Indonesia) working with women factory workers facing automation and digital monitoring in industrial workplaces;

<sup>&</sup>lt;sup>3</sup> Asia Pacific Forum on Women, Law and Development (APWLD). (2023). *Investigating the nexus between digitalisation and the increase in household debt among women workers in Asia and the Pacific: A multi-country research*. https://apwld.org/investigating-the-nexus-between-digitalisation-and-the-increase-in-household-debt-among-women-workers-in-asia-and-the-pacific-a-multi-country-research/

- Just Economy and Labour Institute JELI (Thailand) and the Southern Riders Association working with platform delivery women workers;
- Korea Domestic Workers' Union KDWU (Republic of Korea) working on digital platforms and domestic work;
- Nonoy Librado Development Foundation (Philippines) working with women sorters/packers in an express-delivery warehouse in Davao City.

Taken together, these findings provide a grounded picture of how platformisation, automation and digital control are remaking women's work. Corporations expand their reach into women's time, pay and even their bodies. But grassroots women workers are not silent. They are resisting these changes and asserting their rights. This analysis is organised around three interconnected themes: the spread of platform-based labour; the effects of automation and mechanisation in women-intensive sectors; and the rise of surveillance and algorithmic control across both platform and non-platform settings. Across all three, common threads emerge: informalisation of work, deskilling, exclusion from technical roles and heightened occupational health and safety risks.

The report closes with demands directed at governments, employers, unions, brands and international bodies.



# **Key Findings and Analysis**

### 1. Impact of Platformisation on Women Workers

Platformisation has transformed not only how workers find jobs but also how that work is managed, incentivised, monitored and paid. Platform companies entice workers with promises of flexibility and quick earnings, but in practice access to work is controlled by opaque algorithms with no transparency or accountability. In Asia and the Pacific, the gig economy represents between 0.7 per cent and 38.1 per cent of total employment across different economies, while women comprise 19 to 56 per cent of platform workers.<sup>4</sup> This expansion shows both the scale and the gendered nature of platform work in Asia and the Pacific. Operating in legal grey zones, platform companies exploit gaps in labour law and classification, reproducing entrenched hierarchies that exclude women from rights, protections and equal pay.

#### 1.1 Gendered segmentation and stereotyping

Across the regions, women are steered—through platform design and discriminatory practices—into gendered roles that cap pay and mobility. CFSWF's FPAR in Cambodia exposes the deliberate gatekeeping of women riders. Company staff admitted to intentionally limiting the number of women riders, due to their assumption that women riders are slow and do not provide customer satisfaction.

'I used to ask company office staff about the news rider register and she said the company do not want more women riders because those women riders drive slowly and cannot provide customer satisfaction and cause a lot of problems.'

- Woman rider, Cambodia

Such pre-emptive exclusion reveals how digital labour platforms replicate offline inequalities and entrench patriarchal biases. What is framed as algorithmic neutrality is in fact shaped by discriminatory human decisions that demand accountability.

In Davao City, Philippines, Nonoy Librado's FPAR reveals how the long-standing 'Maria Clara' archetype (the meek, compliant woman) continues to shape job distribution in warehouses. Women are concentrated in sorting and packing, entry-level roles with little mobility, while men dominate delivery and supervisory roles, which offer more authority and pathways to advancement.

<sup>&</sup>lt;sup>4</sup> Asia-Pacific Economic Cooperation. (2024). *Unpacking Issues in the Gig Economy: Policy Approaches to Empower Women in APEC.* https://www.apec.org/publications/2024/01/unpacking-issues-in-the-gig-economy-policy-approaches-to-empower-women-in-apec

These patterns demonstrate that platform logics are not new, but instead reiterate pre-existing gender norms and patriarchal divisions of labour. Technology may present itself as modern, but it extends old patriarchal divisions of labour, keeping women workers in precarious, low-paid and vulnerable positions.

#### 1.2 Wage suppression and cost shifting

Across the FPARs, wages emerge as a moving target than a guaranteed right. In Thailand, JELI's FPAR found that per-delivery rates have shrunk over time, forcing women riders to work longer hours just to hit shifting bonus thresholds. Of the surveyed women, 98 per cent reported that their earnings are insufficient even to cover their most basic living expenses.

'We deliver meals every day, but we can't afford our own. That's not just a personal struggle. It's a failure of a system that exploits women's labour and gives nothing back.'

- Woman rider, Thailand

Women riders' vulnerability is further heightened due to unpredictable dynamics of the gig economy such as the deep opacity of penalties and policy changes.

'Our livelihoods shouldn't depend on algorithms we can't see or understand. We deserve jobs that are predictable, secure and enough to live on, not constant fear of being deactivated overnight.'

- Woman rider, Thailand

Cambodian women food delivery workers and women domestic workers in the Republic of Korea echoed these concerns, noting unexplained changes in cost and incentive structures that left them suspicious that performance thresholds were shifting behind the screen. While figures vary by site, the pattern is consistent: apps shift costs of fuel, maintenance, phones and data onto women workers while keeping pay calculations opaque.

'To become a food delivery, we have to have our own money. First, money has to be paid at the register to get a rider uniform and relevant material.'



'I was paid 12,800 KRW [South Korean Won] per hour through the app, but when I later asked the client, they told me they had been charged over 17,000 KRW per hour by the company.'

- Woman domestic worker, Republic of Korea

In the Philippines, Nonoy Librado's FPAR shows how pay insecurity is institutionalised in Davao's A2Z Express warehouse through a digitally mediated 'prio' (priority) system. Shifts are allocated based on opaque criteria like attendance logs and supervisor favouritism and women warehouse workers stressed how the system 'masks discrimination.'

'I've seen some people who are always absent but still get prioritised. As long as the supervisors like you, you'll be prioritised if you have connections with them. But for people like us who have many children - sometimes they get sick, sometimes I get sick to the point that I really can't go to work because I have asthma - I have to wait a week or even two before I can report back to the warehouse.'

- Woman warehouse worker, Philippines

Women workers also endure outright wage theft disguised as 'company policy'.

'If we're talking about wages, our company has a practice where we don't get paid every 31st of the month. Indeed, I was surprised at first, but the company said it was 'charity.' This practice has been going on for years. We wanted to complain but since everybody sort of accepted it, we just went along. Plus, we're afraid of what would happen to us if we don't report for work every 31st, maybe we would be laid off. That's why we still report for work despite not getting paid for it.'

- Woman warehouse worker, Philippines

Across all sites, the through-line is clear: platform companies and digitalised workplaces suppress wages while externalising the costs of work. What is sold as 'high-paying flexible gigs' is nothing more than a veneer for corporate extraction of women's labour and time. Women workers are forced to continually readjust to shifting systems, always at their own expense and risk.

#### 1.3 Health, safety and well-being

The promise of flexibility often conceals profound risks to women workers' health, safety and well-being. Daily hazards dominate platform and digitalised work. Women riders in Thailand and Cambodia described enduring extreme heat, speed and traffic without insurance or protection when accidents occurred. Platforms evade responsibility by calling them 'partners', stripping them of rights to compensation and social protection. In Phnom Penh, at least three women riders working with Foodpanda were injured in 2023 and received no support from the employer or state schemes. The FNU FPAR in the Philippines found that dashboards and patient-tracking systems cut into the rest and recovery time of nurses, heightening risks of burnout, while women warehouse workers in Davao, Philippines reported chronic exhaustion, long hours and disrupted rest cycles.

'In our group, the common observation was that we lack sleep, we are exhausted from work, and we have no time for relaxation or family bonding.'

Woman warehouse worker, Philippines

Alongside these violations, women workers face harassment in multiple forms. In Cambodia, women riders described being harassed by customers while on delivery, with no grievance channels or support systems available. In Thailand, women riders also mentioned widespread sexual harassment, with half recounting experiences ranging from unsolicited lewd remarks to frightening physical threats. Platforms not only failed to create reporting mechanisms, but also ignored the emotional toll these incidents left behind. For many women riders, the risk escalates after dark. Fear of harassment during nighttime deliveries creates constant anxiety. Yet the pressures of precarious work force women to keep riding through danger, while platforms profited from risk without caring for women's safety.

'When customers harass us with words or with threats, we're left completely alone. There's nowhere to report, no one to turn to.

We're not just workers without rights. We're women without protection.'

- Woman rider, Thailand



#### 1.4 Informalisation and exclusion from labour protections

The platform model's preference to use terms such as 'independent contractor' or 'partner' is not incidental. It is a deliberate strategy, a legal shield to deny women workers recognition as employees and to strip them of their rights. In Thailand, JELI's FPAR shows how the 'business partner' framing allows companies to evade employer obligations and responsibility for women workers' fundamental labour rights, including social protection, accident compensation and safe working conditions. Women riders thus navigate daily risks with little to no guarantees of protection.

'When we fall off our bikes or get sick, there's no safety net. We're not asking for anything more than what every worker should have—protection, dignity, and recognition.'

Woman rider, Thailand

The KDWU FPAR underscores how this exclusion builds on long-standing legal gaps in domestic and care work. For decades, domestic workers in the Republic of Korea were excluded from key labour laws, including the Employment Insurance Act, Minimum Wage Act, Industrial Accident Compensation Insurance Act and Labour Standards Act. Only in 2021 was the Domestic Workers Employment Improvement Act enacted to extend limited protections, though enforcement remains weak and gaps persist.

Across the FPARs, women workers make clear that platformisation is not creating flexibility but is instead accelerating informalisation. It entrenches the denial of rights, bypasses existing labour standards and forces women workers to bear the costs of uncertainty and precarity.



# 2. Effects of Automation and Mechanisation in Women-Intensive Sectors

Automation is not new in Asia's industries, but what women are now facing marks a sharper, more extractive phase of industrial change. It is faster, more capital-heavy and rolled out with little planning for the workers whose jobs are displaced or transformed. Regionally, automation interacts with deep structural inequalities: two-thirds of workers in Asia and the Pacific remain in informal employment and more than one-third are under-skilled for the roles they hold<sup>5</sup>—conditions that make automation especially extractive for women.<sup>6</sup> Across FPARs, the picture is uneven. Some tasks may become less physically heavy, but most become faster, more pressurised and increasingly stripped of women's control. Crucially, pathways into better-paid roles are narrowing, leaving women at the bottom of a reorganised labour hierarchy.

#### 2.1 Displacement and deskilling

In Bangladesh's Ready-made Garments (RMG) factories, women described a shift from learning an entire operation to feeding or tending a specific machine step. On paper this looks like upskilling, but on the line, it means losing control over their craft and becoming tied to machine pace. Women workers repeatedly flagged heavier workloads linked to machine-paced targets, alongside fears of losing 'helper' posts that once served as entry points to better roles. Wages, meanwhile, stayed flat or even dipped, as hours were cut or jobs disappeared.

The mental health impacts of these pressures are equally stark. Constant fatigue, harassment and the uncertainty of unstable shifts corrode women's well-being. Riders described sleepless nights and stress over unpredictable income. Nurses warned that digital surveillance intensified anxiety and burnout, while depriving them of recovery time. Women workers also described the mental strain of being tethered to their phones — constantly checking apps or group chats to see if shifts were available or orders were incoming. This 'always-on' vigilance robbed them of time with their families and heightened stress, as the pressure of unpredictable work intruded into their private lives. Several women also linked automation to outright displacement. Those who lost their jobs had no training or redeployment options, while those who remained faced stagnant wages and reduced working hours that pushed many into cycles of debt.

<sup>&</sup>lt;sup>5</sup> Asian Development Bank. (2021). *Quality Jobs and the Future of Work in Asia and the Pacific*. https://www.adb.org/sites/default/files/publication/999501/quality-jobs-future-work-asia-pacific.pdf

<sup>&</sup>lt;sup>6</sup> ILO, Asia-Pacific Employment and Social Outlook 2024.

'In the last week of the month, we were out of money we get as salary. We have to borrow money from the Mahajon (leader) with 15 per cent interest to buy food for my family. Next month, when I get the salary, a big amount had to be set aside to repay the debt.

This way, we kept falling into the trap of debt cycle.'

#### - Woman garment worker, Bangladesh

Women factory workers from Indonesia also mentioned being reassigned or dismissed when automated systems arrived. GSBI FPAR notes retraining is scarce and often prioritised for men, leaving women to 'figure it out' alone.

On construction sites in Ahmedabad, India, Aajeevika Bureau's FPAR shows a similar dynamic. Off-site precast systems, batching plants and AAC block production reduce manual tasks on-site, but women are clustered into cleaning and loading jobs with little chance of moving into higher-paid, machine-adjacent roles. They are paid 20–30 per cent less than men and are relegated to the lowest ends of the labour value chain, a trend that deepens as industrialised methods expand.

Mechanisation also interacts with long-standing recruitment practices like the dadon system. Under this system, contractors advance money to workers before they migrate for construction jobs and then recover it through wage deductions on-site. While framed as support, the dadon system effectively binds women construction workers to contractors, restricts their bargaining power and reinforces cycles of debt bondage. Instead of creating mobility into new machine-related roles, mechanisation reinforces debt bondage. Women are left dependent on contractors for survival, trapped in cycles of debt that prevent them from moving up the labour chain or negotiating fairer pay.



#### 2.2 Intensification of workloads

Under the veneer of efficiency and flexibility, automation and digitalisation have intensified rather than eased women's workloads. Employers present new systems as innovations that make tasks lighter or simpler, yet FPARs show a different reality: rising targets, shrinking breaks, longer hours and heavier physical and emotional strain.

In RMG factories in Dhaka, Bangladesh, women workers spoke about targets rising to match machine cycles and so, breaks become harder to take because the line does not pause. The FPAR records women workers' accounts of heavier pace, longer hours or unpaid overtime, all narrated as consequences of semi-automated or digitally timed processes.

'I joined as an operator after finishing secondary school, hoping to study at night. But the pressure to meet targets has only grown since automation. I'm exhausted and can't focus on anything else.'

- Woman garment worker, Bangladesh

Similarly, women factory workers in Indonesia mentioned being pushed to work at machine pace, with production targets constantly raised, breaks cut short and supervisors shouting at them to move faster, making even basic needs like resting or using the toilet extremely difficult.

'The work is very fast, standing and bending, if there is no one to replace the work, the restroom is very difficult.'

- Women factory worker, Indonesia

Women construction workers in Ahmedabad, India, described how mechanised equipment reduces some heavy lifting but raises daily output expectations. Instead of easing workloads, machines anchor a new cycle of constant manual support tasks—hauling, cleaning, loading—that fall disproportionately to women. Aajeevika Bureau's FPAR observes that builders increasingly prefer single male migrants for the long shifts demanded by capital-intensive sites, sidelining women while intensifying the work that remains available to them.

In the Philippines, nurses revealed how datafication and automation of hospital systems—through tools like Integrated Hospital Operations and Management Information System (iHOMIS) and BizBox, added new layers of administrative work on top of already heavy patient care. With only one shared computer in many stations, women nurses must handle both clinical and digital tasks, often extending their hours without additional pay. Instead of lightening workloads, these systems increased exhaustion, eroded work–life balance and placed severe strain on women's health.

'I already had two miscarriages while working as a nurse. This job is very exhausting, I do not enjoy anymore my married life. There is no work-life balance because of heavy patient load and prolonged work hours.'

#### - Woman nurse, Philippines

In Indonesian footwear factories, women supervisors reported receiving a fixed monthly wage that already included allowances and overtime, under what workers call the 'All-In' payroll system. This arrangement effectively erases limits on working time and legitimises longer days without additional pay. Digital attendance now gates bonuses, adding constant pressure to maintain speed. Women migrant domestic workers in the Republic of Korea echoed these conditions of relentless work. Tasked with both household chores and care duties, they described an intensification that left no time to rest.

'Even when the baby is asleep, I don't get any rest. There's just too much work. The client keeps giving me more things to do. The only rest I get is when I'm folding clothes.'

- Migrant domestic worker, Republic of Korea

'After giving birth, taking a break to breastfeed my child was very difficult. I had to find a replacement worker and get permission from my supervisor.'

Women factory worker, Indonesia

Women warehouse workers in Davao, Philippines mentioned that far from easing their load, technologies like conveyors and workplace apps have made tasks more complex while leaving heavy manual lifting intact.

'For me, it would seem that we don't benefit much from the technology we use. Yes, there are conveyors supposedly to make work easier but we all still have to do heavy lifting of sacks of parcels or 'bulky,' that would be around 30 to 40 kilos. It doesn't matter if you're a man or a woman. In truth, these apps just make work more complex, add to our expenses and problems.'

- Woman warehouse worker, Philippines

#### 2.3 Health, safety and occupational hazards

Beyond sheer workload intensification, automation introduces new occupational hazards that deepen gendered health risks. In Indonesia, women spoke of being unable to even stop for bio breaks while in Dhaka, Bangladesh' RMG lines, women

spoke of the physical toll of repetitive, machine-paced tasks such as continuous fabric feeding. The machines never slow down, forcing women to push beyond their limits while working beside hot, relentless equipment.

'We work until it is difficult even to urinate.'

- Women factory worker, Indonesia

'Sometimes even just to pee, we have to ask someone to replace us.'

- Women factory worker, Indonesia

'It's more stressful because the machines don't account for human limits. We still get tired, but the machine doesn't.'

- Woman garment worker, Bangladesh

Even with automation, I am expected to meet a target of 300 pieces per hour without the assistance of a helper. This causes significant physical strain.'

- Woman garment worker, Bangladesh

The absence of training on new automated systems compounds the danger, leaving women to learn through trial and error in high-risk environments.

'They gave us no training on the new machines. We're just figuring it out and mistakes are dangerous.'

- Woman garment worker, Bangladesh

Mechanisation also isolates women workers since targets are set for individuals, leaving less room for a teammate to step in when someone needs to slow down or needs a break.

Furthermore, these risks are compounded by employers' non-compliance with women-specific labour provisions. Nonoy Librado's FPAR in the Philippines found that women warehouse workers were denied maternity protection, rest periods and facilities for nursing mothers. Such omissions institutionalise Gender Based Violence (GBV) at work, forcing women to endure unsafe and discriminatory conditions that undermine both their health and dignity.

On Indian construction sites, women are barred from machine-adjacent zones under the pretext of 'risk.' This exclusion does not protect them—it entrenches discrimination. It denies women access to higher-paid technical roles, invisibilises their labour and pushes them into the lowest-paid, most hazardous tasks such as debris cleaning and load carrying, all without social security or safety provisioning.

Aajeevika Bureau's FPAR highlights a pervasive 'safety bias' among site managers and engineers, many of whom described women's presence near machines as a 'risk' or 'liability'. Several supervisors expressed similar views: 'If something happens to her, the whole family will suffer; we do not want to spend energy on matters like harassment and women's safety; all that matters is the work being done.' This framing treats women's safety as an individual burden rather than a workplace obligation, reinforcing their exclusion from technical roles.

#### 2.4 Gendered access to upskilling

Access to training is deeply gendered, shaped by employers' biases, family expectations and entrenched patriarchal norms. In Dhaka, Bangladesh, women workers were eager to learn new skills but were systematically denied opportunities. This was echoed by women construction workers from Ahmedabad in India, where they were told:

'This is not your work'; 'You are only meant to be a helper' and 'As a woman, you shouldn't touch machines.'

- Focus Group Discussion (FGD) with women construction workers, India

'They think we are not capable of learning new machines, but they do not even give us a chance.'

- Woman garment worker, Bangladesh

'Women cannot learn machines at all. I can say this 100 per cent because machines can give electric shock also. They can learn plaster work but not use machines.'

- Construction labour contractor, India

Barriers to training opportunities are compounded by household expectations and economic insecurity, which make it difficult for women to take up even those rare chances to learn. For others, being thrust into using new equipment without guidance only deepened anxiety about job security.

'I wanted to join a machine training session, but my family said I was neglecting my duties at home.'

- Woman garment worker, Bangladesh

'We live hand to mouth. How can I think about learning something new when I don't know if I can pay rent next month?'

Woman garment worker, Bangladesh

# 'We are scared every day of losing our jobs because we do not know how to handle these machines.'

- Woman garment worker, Bangladesh

In Indonesia's shoe factories, women likewise face exclusion from technical training. GSBI's FPAR notes that men are prioritised for machine programming or maintenance, while women remain in repetitive support roles. In Ahmedabad, India, women workers described a similar set of constraints, where household permission and workplace bias limit their access to upskilling. Some explained that husbands decided whether training was even possible:

#### 'If he allows, then I will learn.'

- Woman construction worker, India

# 'Our husbands say that we won't be able to learn, so it's better to work together.'

Woman construction worker, India

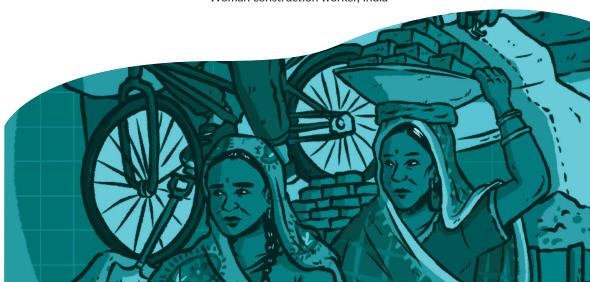
When women did access training, the results were visible - recognition, higher wages and a pathway out of invisibilised roles. Yet stigma continued to block others from entering better-paid work:

'The supervisor recognises me as a skilled worker and pays me higher wages.'

- Woman construction worker, India

'I know skilled masonry work, but I don't do it because I am a widow... I would rather do the cleaning work.'

Woman construction worker, India



#### 2.5 Employment insecurity and contractual precarity

For women workers, mechanisation has not meant progress but insecurity—contracts downgraded, hours cut and livelihoods made disposable. The Development Society FPAR in Dhaka, Bangladesh, recorded seasonal unemployment, the elimination of helper positions and the constant fear of being 'replaceable' by machines or by younger recruits with some digital familiarity. Age becomes a marker of vulnerability, with older women especially at risk of being pushed out of jobs they have held for decades.

'I have worked here for 25 years. My hands know the stitches, but now machines do it all. I don't know how to use the machines, and no one has time to teach me.'

- Woman garment worker (aged 50), Bangladesh

On Indian construction sites, the jodi system of recruitment compounds this insecurity. Women workers are hired only as part of husband-wife pairs, with wages paid to men. Women are rendered invisible as independent workers, their labour devalued as 'help'. As the Aajeevika Bureau FPAR notes, single women struggle to find work at construction sites. This practice denies women independent recognition, entrenches wage disparities (women earning 40–50 per cent less) and reinforces the stereotype that only men can be 'skilled'. Instead of providing stability, mechanisation plus jodi recruitment lock women into the lowest-paid, most insecure roles, with little chance of mobility.

## 3. Digital Surveillance and Algorithmic Control

Digital tools are often promoted as neutral solutions to 'improve efficiency' at workplaces. In practice however, monitoring apps, GPS pins, ratings and dashboards do more than track work. They organise it, intensify it and erode women workers' ability to set boundaries or challenge unfair decisions.

#### 3.1 Surveillance as management

In Davao, Philippines' A2Z Express warehouse, surveillance underpins the entire operation, stripping women workers of basic rights to rest and association. It goes far beyond cameras: team leaders must photograph each sorter (a women worker responsible for categorising and packing parcels) with GPS coordinates, record log-in and log-out times and maintain daily notes in the 'Timestamp' app, then collate and send everything via Lark software. These granular records feed directly into payroll and staffing decisions, including who is granted the coveted 'prio' shifts.

Constant monitoring through apps blurs the line between attendance verification and behavioural surveillance. Women warehouse workers described how the dense

network of CCTVs and tracking tools creates a climate of fear, where even the smallest lapse can trigger reprimand or dismissal. Under such constant scrutiny, many hesitate to organise, effectively denying them their fundamental right to freedom of association.

'I have worked here for 25 years. My hands know the stitches, but now machines do it all. I don't know how to use the machines, and no one has time to teach me.'

- Woman garment worker (aged 50), Bangladesh

'With regard to forming an association or union, we are a bit afraid. One, we are not regular workers. Once we make even the smallest error, we can be laid off. Second, there are so many CCTVs around. If your eyes close just for a second, the management will call you upstairs to explain yourself.' – Woman warehouse worker, Philippines

'It's really tough to gather, we can't really gather. For one, we don't see each other or other workers from other teams because of shift schedules. There are more women sorters in the night shift than there are in the day shift, and shift schedules vary. If one of our coworkers has problems, we resolve it within the group, we can't communicate with other teams.'

- Woman warehouse worker, Philippines

Surveillance also extends beyond the shopfloor. A private security agency contracted by A2Z requires workers to use the 'Bladecutter' app, which verifies workers' identities, logs incidents and tracks locations in real time. Far from a safety tool, the app adds another layer to the surveillance regime already imposed. For women warehouse workers, this creates a constant sense of being watched, where every action is recorded and control extends into movement and time outside the shopfloor.

The KDWU FPAR reveals how surveillance operates more invisibly in domestic work platforms in the Republic of Korea. Women domestic workers are expected to respond around the clock through apps or messaging, with agencies using job-matching and ratings systems to impose constant control and monitoring without transparency or accountability.

#### 3.2 Algorithmic bias and opaque decision-making

If surveillance manages workers, algorithmic decision-making determines their opportunities. Because the systems are hidden, bias becomes harder to prove — and easier for companies to deny. The KDWU FPAR highlights how women

domestic workers are matched, scored and sometimes sidelined by platform logics. Ratings and recommendations determine access to jobs and wages, leaving women workers sanctioned for even perceived non-compliance.

'Usually, I see jobs close to my place of residence on the app, but strangely, I only see jobs far away these days. Later, I found out that the customer complained that he wasn't satisfied with what I did.'

- Woman domestic worker, Republic of Korea

A2Z's warehouse algorithmic bias is less hidden but equally damaging. As mentioned in the previous section, payroll and staffing decisions hinge on data collected and uploaded by team leaders. As the process is fully embedded in digital platforms, women workers cannot contest errors or negotiate outcomes — the decision is made before they even ask the question.

#### 3.3 Monitoring over dignity: normalising surveillance, erasing care

For many women sorters and packers in Davao's warehouse, being recorded, counted and tracked became background noise—until someone named it. Nonoy Librado's FPAR revealed that women workers are monitored through biometrics, CCTV and digital apps, yet many had never been asked to reflect on what this meant for their human rights. Their responses showed how deeply surveillance had been normalised, treated as routine rather than a violation.

'With CCTVs, I think it is justified because there are incidences of theft in the warehouse – parcels disappearing, damaged, issues like these, that's why I think it's justified to have CCTVs in the warehouse.'

- Woman warehouse worker, Philippines

'With the digital apps, no, we are not aware [of implications for privacy]. We let it be because I think it's harmless, until now. It's policy – that's why we just go along with it.'

- Woman warehouse worker, Philippines

The FPAR analysis notes that constant photo-taking and tagging creates pressure for women warehouse workers. The unrelenting gaze heightens stress and anxiety, reducing dignity at work to a regime where 'being seen' is treated as more important than being safe or respected.

In the Philippines, the FNU FPAR documents how nurses experience a creeping surveillance fatigue from electronic systems like iHOMIS, Electronic Medical

Record (EMR) and Electronic Health Record (EHR), alongside biometric timekeeping. In some hospitals, digital logging did not replace old processes hence paper logbooks still had to be filled. This duplication created what the FPAR described as double work—more screens, more clicks, more layers of visibility, without relief in staffing or rest. Instead of easing workloads, these systems signalled mistrust, turning documentation into surveillance while leaving unsafe staffing unaddressed. The silent presence of CCTV cameras in wards, entrances and nurse stations added to this sense of constant oversight. Yet while monitoring infrastructure multiplied, facilities that would affirm dignity and care, such as breastfeeding rooms, childcare spaces or adequate rest areas, were conspicuously absent.

In the Republic of Korea, KDWU's FPAR revealed that digital monitoring went even further. Women domestic workers reported that their social media activity was being tracked by agencies, and some were even tasked with reporting on each other. Such practices fostered mistrust and division within their groups, leaving workers under constant observation and eroding solidarity.



#### 3.4 Vagueness as design: regulation that serves capital

Across several sites, women workers underscored that digital monitoring and algorithmic control operate in a legal twilight—shaping their daily lives while evading enforceable rules. In Davao, Philippines, women warehouse workers explicitly called for regulation of workplace surveillance as part of their advocacy, recognising that existing protections are either absent or too weak to matter. Women riders from Thailand described similar gaps in protection, noting that despite their constant visibility through apps, they remain invisible in the eyes of the law.

'As women riders, we face the same dangers on the road, but we also worry about our bodies, our families and our future. No maternity leave. No accident coverage. Just uncertainty every single day.'

Woman rider, Thailand

In the Republic of Korea, migrant domestic workers exemplify how vagueness is not incidental but by design. KDWU's FPAR shows how platforms and agencies operate in a zone of near-impunity: opaque ratings, sudden cancellations and arbitrary sanctions govern women's livelihoods, while Article 11 of the Labour Standards Act (1953) excludes them from even the most basic labour protections.

'If a customer suddenly cancels the contract, saying it was my fault, I can't work until I'm assigned a new client. So the 30-hour guarantee isn't met. I often don't even know what I did wrong until the company tells me afterward.'

- Woman migrant domestic worker, Republic of Korea

'The customer gave me a one-sided low rating, but after that, the job doesn't appear in the app.'

Woman domestic worker, Republic of Korea

These accounts show how 'flexibility' and 'guarantees' on paper dissolve into precarity in practice. Vagueness allows capital to shift risk entirely onto women workers, while keeping them outside the reach of meaningful regulation.

Taken together, the vagueness serves capital: responsibility is kept off the books while women are kept on call. Across the studies, women demand rules that make digital control accountable—from surveillance regulation in warehouses to social protections for riders and domestic workers.

### 4. Collective Unity, Organising and Resistance

Across sites, women are not passively absorbing platformisation, automation or surveillance—they are resisting, asserting their rights and building forms of collective power. Whether through union branches, chat groups or neighbourhood circles, women workers claim fundamental labour rights and women's human rights. The forms differ, but the common thread is agency—speaking back to power, negotiating space and asserting dignity.

#### 4.1 Resistance and everyday tactics

Across sectors, women workers are actively resisting the erosion of their fundamental labour rights and human rights. Their everyday organising makes visible the struggles hidden behind platforms, warehouses and hospitals, and asserts dignity against digital and corporate control. In Thailand, women riders explained that FPAR gave them the knowledge and confidence to name their struggles as labour rights issues and to confront injustice.

'Before, I didn't believe I was smart enough to talk about labour rights. Now, after FPAR, I not only speak—I speak with confidence, with knowledge, and with purpose.'

Woman rider, Thailand

'FPAR helped me realise that you don't need a degree to understand injustice. Lived experience is knowledge, and we carry that every day.'

Woman rider, Thailand

'At first, I just thought that we were just delivering food all day.

I didn't think that I had any rights. But when I listened to my peer women riders talking about labour rights, I started to question why we didn't have social security. Why didn't we have the right to a holiday leave or family leave?'

Woman rider, Thailand

In Cambodia, women delivery workers organised under CFSWF demand transparency and fairness in route allocation, which often pushes them onto longer, riskier and less profitable runs. They resist opaque suspensions and penalties by pressing platform companies for clear rules and accountability.

Women factory workers in Indonesia, likewise turned FPAR sessions into spaces of collective awakening. They began connecting long-standing grievances, unpaid overtime, constant surveillance, and machine-paced targets to broader patterns of automation-driven exploitation. Through small-group discussions held outside

factory hours, women mapped their common struggles and reframed them as labour-rights violations rather than personal failings. This collective realisation marked a first step towards rebuilding union branches that had weakened during the pandemic.

In Davao, Philippines, women warehouse workers stress solidarity as their first line of resistance:

'We really help each other because we can only rely on one another.

If one of us has a problem, we help her in any way we can.'

- Woman warehouse worker, Philippines

Together, these everyday tactics are not marginal but central. They are deliberate, collective strategies through which women workers confront exploitation, assert their dignity and demand their rights to decent work and justice in digitalised workplaces.

#### 4.2 Revitalising unions and worker organisations

Where unions or workers' collectives exist, women workers are pushing them to confront techno-driven change. In the Republic of Korea, migrant domestic workers and their allies illustrate a coalition route. Organisations first convened as Joint Action to contest discriminatory state policies, and later expanded into the broader Solidarity Council, uniting 31 groups to resist the government's pilot programme for migrant domestic labour. Their demands are uncompromising: repeal Article 11 of the Labour Standards Act (1953), equal pay for equal work and contract security that is not tied to opaque customer ratings. Women domestic workers mentioned how deception and overwork define their daily realities:

'When I signed the contract, I was told it would be childcare work, but I haven't cared for a single child to this day. I just clean the house.'

- Migrant domestic worker, Republic of Korea

'After cleaning the entire house, I have to take care of two children.'

Migrant domestic worker, Republic of Korea

In Dhaka, Bangladesh, Development Society's FPAR notes that women workers are organising through community meetings and focus group discussions, to share what they face on the factory floor and to prepare collective advocacy for training and safer workloads. Their anxiety about job loss is real, but so too is their demand: training that actually matches the machines being deployed, so that women are not deliberately excluded from the future of work.

Similar cross-organisational alliances are emerging in other countries, demonstrating how women workers are expanding the space of collective bargaining beyond single sectors. Aajeevika Bureau in Ahmedabad, India, has worked through a construction workers' collective to put automation and gendered exclusion squarely on union agendas and into advocacy plans. Women workers have initiated consultations, dialogues with builders' associations and labour departments and piloted on-the-job training that pushes them from 'helper' roles toward basic machine operation. Even these initial steps are recalibrating what a fair wage sounds like, building bargaining power and asserting women's right to equality at work.

In Indonesia, women factory workers have created spaces for reflection and strategy-building beyond the factory gates, examining how automation, digital surveillance and the "All-In" pay system have reshaped work and undermined labour protections. Their organising also challenges company-controlled unions, demanding recognition of GSBI branches and the right to freedom of association in line with national law.



In Thailand, women riders organised through JELI are pressing to move beyond the label of 'partners' and claim recognition as workers under Thai labour law. Their demands combine calls for formal protection with grassroots organising:

'All of us riders want to be officially recognised as employees under Thai labour law. What we do is real work, not just gigs. We deserve basic rights like social security, maternity leave and a compensation fund when we get injured on the job. These are protections clearly stated under Section 33 of the Social Security Act, and we believe we are entitled to them just like any other worker.'

- Woman rider, Thailand

'We're not just riding—we're organising, advocating and building power from the ground up. From fighting for our right to social security under Section 33, to demanding recognition as employees, to creating safe rest spaces for our sisters—we're shaping a future where women riders are seen, heard and protected.'

- Woman rider, Thailand

In Davao, Philippines, warehouse workers explained that while they already rely on each other for support, they now want to collectivise those efforts into a formal association.

'We want to form an association so our individual efforts to help each other can be collectivised and so that we can access government pathways for financial and livelihood assistance for those who find themselves out of work. Also, if we unite, it will be easier to convey our needs to management.'

Woman warehouse worker, Philippines

#### 4.3 Reclaiming technological spaces

Women workers are also reclaiming technological spaces that were designed to monitor, discipline or exclude them. Filipino nurses describe a different form of over-exposure: electronic records and biometric timekeeping layered on top of paper logbooks in some hospitals, which stretches documentation into overtime and blurs the boundary of their shifts. Their organising focused on demanding staffing protections and time-bound policies that match the technologies already in place, insisting that digital tools must serve care and safety, not extend exploitation.

In Ahmedabad, India, 'reclaiming' takes the form of women co-designing training that opens access to off-site, tech-intensive construction roles. By pairing these with practical enablers such as childcare facilities, they are not only demanding

equal entry into machine-driven work but also dismantling structural barriers that prevent women from taking up such roles. Similarly, women factory workers in Indonesia are beginning to engage with the very technologies that mediate their work. Through FPAR sessions, they examined how automated machinery, CCTV surveillance and the company's internal 'WOVO' app are used to intensify production and separate workers from unions. By analysing these systems together, women have developed collective strategies to use digital complaint mechanisms for mutual support and to demand transparency in wage and overtime practices.

Platform workers, too, are asserting their right to reshape the digital spaces that govern their lives. In Thailand, women riders organised through JELI and the Southern Riders Association are campaigning to be recognised as workers under Thai labour law, demanding social security and protections against opaque app systems. Through FPAR tools like process mapping, FGDs and storytelling, they are turning platforms from sites of exclusion into sites of advocacy. In Cambodia, CFSWF has mobilised women delivery riders into a union network that demands transparency in route allocation, fair treatment in suspensions and protections such as OSH and maternity rights.

Across contexts, these struggles show that women workers are not merely subject to technological control—they are actively subverting, reshaping and demanding technologies that uphold their rights to decent work, dignity and equality.

#### 4.4 Cross-sector links and policy asks

Across Asia and the Pacific, women workers are connecting their struggles across sectors and naming collective demands that cut through industries and occupations. In Cambodia, women delivery riders are pressing for legal protections against arbitrary penalties and opaque suspensions, demands that resonate with Thai riders' calls for employee status and predictable rates of pay. In Bangladeshi garment lines, women workers are pushing back against rising production targets by demanding structured training that equips them to operate the semi-automated machines already reshaping their work. In Ahmedabad, India, construction workers are calling not only for equal wages but also for childcare and skilling opportunities that recognise women's right to be included in the industrialisation of construction.

In Indonesia, women factory workers are calling for the abolition of the 'All-In' wage system that absorbs overtime pay and conceals excessive working hours, along with strict enforcement of wage and health protections already guaranteed in law. Their demands also urge national regulation of automation to ensure that technological change safeguards jobs, prevents overwork and wage suppression, and allows the benefits of increased productivity to be shared with workers rather than extracted from them. They further emphasise the right to choose accessible clinics under the

BPJS (Social Security Agency on Health) system and the recognition of independent unions over company-controlled or 'yellow' unions, linking these workplace concerns to a broader call for state accountability in the era of automation.

In the Republic of Korea, migrant domestic workers organised through KDWU's Solidarity Council are advancing demands for equal pay, non-discrimination and contract security that is not tied to the opaque and unaccountable system of customer ratings. Meanwhile, Filipino nurses are linking staffing levels, guaranteed rest time and patient safety and are revitalising union chapters to press these demands collectively. Women warehouse workers in Davao, Philippines are also setting boundaries and refusing new forms of precarity:

'We will not allow the company to replace the existing contractor and directly hire on-call sorters without benefits. We will not let that happen. We intend to take steps to talk to management about our situation. The impacts will be extreme if this proposal pushes through.'

- Woman warehouse worker, Philippines

Taken together, these calls are not isolated or sector-specific. They are shared demands for decent work, recognised internationally as a fundamental labour right. Women workers across contexts are insisting that technological change must not deepen inequality but instead be accompanied by guarantees of security, dignity and justice.

'We're taking action from the streets to the policy tables. We are building a strong network of women riders, raising our voices for legal recognition and creating community solutions, such as water and rest areas. This is what grassroots power looks like.'



# **Conclusion**

Each of the FPARs shows that technological change is neither neutral nor evenly distributed in its effects. Platformisation, automation, digital surveillance and the steady spread of informalisation, work together to intensify long-standing gendered inequalities. Corporate platforms profit by shifting costs and risks onto women workers, while states retreat from their role as guarantors of rights and act instead as facilitators of digital capital. While technology could widen opportunity, in the absence of safeguards it hardens occupational segregation, suppresses wages, entrenches debt and deepens precarity.

Across garment and construction industries, in nursing, domestic work, warehousing and platform delivery, women workers describe a convergence of pressures: machine-paced targets and opaque dashboards; displacement from once-skilled roles; exclusion from technical training; cycles of debt linked to stagnant wages, 'priority' scheduling and recruitment practices; and heightened physical and mental health risks. Surveillance is often sold as 'protection' yet functions as control. Informalisation removes visibility and, with it, access to labour law and social protection.

At the same time, these FPARs show that women workers are actively resisting. From encrypted messaging groups and peer-training circles to union campaigns and cross-border exchanges, women are experimenting with collective strategies that resist fragmentation and reclaim power and voice.

What follows, then, is less a technological inevitability than a set of policy choices. A gender-just future of work requires governments, employers, business associations, unions, brands and international bodies to act—not as bystanders but as duty-bearers. The recommendations in the next section are drawn directly from FPAR evidence and prioritise changes that are both actionable and capable of shifting power in practice toward women workers' rights and dignity.



# Recommendations

The recommendations below synthesise FPAR findings into focused actions for law, policy, bargaining and practice.

#### 1. Governments and Relevant State Bodies

- 1.1 Recognise employment status and extend protections Government must recognise platform, on-call and informalised workers as workers with full employment rights, not as independent or dependent contractors. States should strictly enforce labour standards at the workplace, including minimum wage, social security, paid leave, maternity protection and accident insurance. Governments must mandate employers, including platform companies and labour contractors, to provide written contracts and direct wage payments to all workers, including those labelled as 'helpers' in construction and warehousing. Labour departments and inspectors must actively monitor compliance, holding both companies and their labour contractors accountable for meeting existing legal obligations to workers.
- **1.2 Worker data rights and algorithmic accountability** Adopt workplace data rules that enshrine: clear purpose limitation and data minimisation; workers' rights to access, opportunity for data correction and portability of data; transparent explanations for automated allocations, ratings, penalties and deactivations; and the right to human review and fast appeal. States must also fund and train labour inspectors and data-protection regulators to audit the algorithmic systems that manage shifts, ratings, or surveillance.
- **1.3 Gender-responsive Just Transition for automation** Before introducing new machines or software, mandate impact assessments, prior consultation with women workers and paid, on-the-clock training. Ensure redeployment without loss of grade or pay and set time-bound targets for women to gain technical certification and access machine roles. States should also encourage mentorship and leadership programmes to break gender segregation in skilled work.
- **1.4 Occupational safety and health for machine-paced and heat-exposed work** Update standards on ergonomics, micro-breaks, ventilation and heat-stress controls, while also addressing mental health risks linked to continuous monitoring. Mandate properly fitted Personal Protective Equipment (PPE), on-site childcare, safe toilets and drinking water at construction sites, warehouses, hospitals and factories. Governments must regulate workload and performance standards so they are realistic and not driven solely by machine pace, which exacerbates stress and fear of dismissal.
- **1.5 Fair and transparent scheduling rules** Establish clear and auditable criteria for shift allocation, bonuses and priority lists; prohibit discriminatory throttling or

denial of shifts due to pregnancy, childbirth or caregiving absences; guarantee workers the right to refuse unsafe or night work without penalty.

- **1.6 Social protection and services for women migrants** Ensure portability of social protection across jurisdictions. Provide multilingual hotlines and independent, status-blind complaint and dialogue mechanisms. Remove residency or spousal-consent barriers to training, certification and union membership. Guarantee equal pay for equal work regardless of nationality.
- **1.7 Gender-sensitive workplace policies and facilities** Operationalise workplace childcare, safe sanitation, breastfeeding spaces and resting areas at or near worksites. Provide safe transport for women workers whose shifts extend into late hours.
- **1.8 Protect the right to organise** Legally recognise associations of platform and informal women workers; prohibit retaliation for collective discussion, coordinated log-offs or union activity; ensure women's representation on tripartite bodies and wage boards; and prohibit employer interference in union formation. Labour departments must end recognition of company-controlled or 'yellow' unions and verify that registered unions and collective agreements are genuinely worker-led and free from management influence.

#### 2. Platform Companies

- **2.1 Guarantee earnings that meet minimum wage after expenses** Set base pay at a level that ensures workers earn at least the statutory minimum wage after deducting costs for fuel, data, maintenance and safety. Companies must publish rate-setting logic in accessible language and disclose how pay for each job is calculated before workers accept it.
- **2.2 Establish fair penalty and deactivation procedures** Provide workers with prior notice and specific reasons for suspensions, downgrades or other penalties. Guarantee a right to human review and a fast appeal with a clear timeline. Workers must not be penalised for refusing unsafe routes, extreme heat or night work.
- **2.3 Ensure transparent allocation and scheduling** Disclose the factors that govern order visibility, ratings and access to shifts. Remove hidden penalties for bathroom breaks, route changes made for safety or caregiving-related unavailability or unavailability in general.
- **2.4 Provide safety without penalisation** Supply all appropriate safety gear at no cost to workers. Ensure in-app SOS and harassment reporting functions that trigger real, timely responses. Maintain comprehensive insurance that covers road incidents, harassment, medical expenses and income loss.

**2.5 Guarantee worker participation and remedy** - Institutionalise regular worker-management meetings on allocation systems, timers, ratings and pay. Maintain accessible 24/7 multilingual grievance mechanisms that provide case numbers, clear timelines and follow-through to closure. Publish periodic summaries so workers can see issues tracked and resolved.

# 3. Automation-Heavy Private Sector (garments/RMG, construction, logistics/warehousing)

- **3.1 Guarantee paid technical upskilling and women's access** Provide paid, on-the-clock training for women in machine operation, programming and maintenance. Set measurable targets to increase women's participation in technical roles. Schedule training sessions at accessible times and ensure childcare and safe transport are available for both training and night shifts.
- **3.2 Require redeployment before roll-out of new machinery** Put in place redeployment plans before installing new machinery. Map equivalent or higher-paid roles for affected workers, protect base pay during transition and give adequate notice. Provide stipends during re-skilling so women are not penalised for learning.
- **3.3 Ensure safe technology introduction and work organisation** Conduct gender-sensitive risk assessments with direct worker participation. Redesign workstations for height and reach, institutionalise micro-breaks and implement heat-stress controls. Governments must require that machine pace does not result in unpaid overtime and that all overtime is accurately recorded and fully paid.
- **3.4 End practices that hide women's work** Abolish jodi-based wage routing and replace it with individual registration and payment systems. List women's names on muster rolls and payslips, ensure direct wage payment to women workers and maintain accurate records that workers can verify.
- **3.5 Provide facilities that make access real** Operationalise childcare, safe toilets, clean drinking water and changing spaces on or near worksites. Align shift schedules with childcare and transport realities to improve women's retention in skilled roles. Guarantee safe transport for late shifts so women can take up higherrisk, better-paid positions.
- **3.6** Regulate surveillance and data governance in warehouses and factories Restrict camera coverage to areas necessary for safety and operations. Limit biometric and geolocation tools to legitimate purposes such as attendance and safety. Provide workers with access logs and explanations for data-driven decisions affecting shifts or pay and establish internal appeal routes.

#### 4. Business Associations and Sector Bodies

- **4.1 Build awareness, guidance and peer learning** Business associations are responsible for providing member companies with plain-language guidance on the labour impacts of platformisation, automation and workplace surveillance. They should keep these issues as standing agenda items and circulate practical tools and short checklists that members can directly adopt. Associations can draw from consultations and advocacy dialogues already happening in sectors like construction and domestic work to show members concrete strategies that protect women workers' rights. They need to gather member needs through surveys and use them to update guidance.
- **4.2 Develop sector-wide skills pipelines** Business associations must collaborate with unions and training providers to ensure structured, paid training that matches the machinery and technologies in use. They must set clear enrolment targets for women in technical courses, recognise prior learning so experienced workers can advance into skilled roles and provide practical enablers such as childcare and safe transport to make training and certification genuinely accessible.
- **4.3 Institutionalise dialogue with state bodies** Business associations must use existing employer forums and tripartite bodies to meet regularly with labour, skills and social-protection ministries. They must table joint proposals on women's inclusion in social protection, OSH upgrades for machine-paced and heat-exposed work and funding for on-the-job training. They need to share sector data to strengthen inspections and standards and support time-bound pilots that can be scaled up if they meet safety and equity benchmarks.

### 5. Trade Unions and Worker Organisations

- **5.1 Organise dispersed and women digital workers** Trade unions and worker organisations must expand their reach to platform and informal workers by using encrypted channels and rotating small-group meetings. They must build women's leadership pipelines through mentoring and skills programmes and include platform and informal women on bargaining teams and in decision-making spaces.
- **5.2** Bargain the technology agenda Unions must negotiate clauses on automation roll-outs, redeployment and paid re-skilling and ensure that demands for fair production targets and transparent, accountable monitoring systems are included in workplace agreements. They must also secure transparency in algorithms, clear penalty rules, enforceable data rights, limits on surveillance and joint OSH committees with the authority to pause unsafe processes.

- **5.3 Provide legal and data support** Unions must provide paralegal assistance for cases of wage theft, unfair penalties or deactivation and social-security claims. They must also build women workers' capacity in data literacy so they can contest ratings, timers and shift systems and equip members with template letters, case logs and step-by-step appeal guides.
- **5.4 Ensure migrant-inclusive outreach** Unions must remove residency or employer-consent barriers to membership, translate materials and meetings into languages workers use and offer flexible dues options. They must partner with migrant community groups for outreach and safe reporting and maintain hotlines or message channels that do not ask for immigration status.
- **5.5** Address company-controlled or 'yellow' unions Trade unions and worker organisations must strengthen awareness among workers to identify and resist company-backed or 'yellow' unions. They must support the formation of independent branches and ensure women's leadership and representation in collective bargaining and union decision-making.

#### 6. UN Mechanisms (ILO, UN Women and related bodies)

- 6.1 Advance standards consistent with partner demands UN mechanisms must support International Labour Conference progress on employment status in platform work, algorithmic management and women worker data rights and a gender-responsive Just Transition framework that includes consultation, redeployment, paid training and due process.
- **6.2 Develop model provisions and technical assistance** UN agencies must draft regional model clauses on deactivation due process, women worker data rights and audits, limits on surveillance in employer households and workplaces, transparent scheduling and allocation and workplace facilities including childcare, sanitation and PPE fit. They must provide technical assistance so governments can adapt and enforce these provisions.
- **6.3 Fund women-centred re-skilling pilots** UN bodies must support multi-country pilots that move women into technical roles opened by automation such as machine operation, maintenance and programming with childcare, transport and stipends in place. They must ensure independent evaluations and share results publicly.
- **6.4 Strengthen monitoring and data** UN agencies must strengthen gender-disaggregated tracking on platform work, automation impacts and surveillance exposure through existing UN/International Labour Organisation (ILO) mechanisms and national statistics. They must harmonise indicators across countries and require public reporting so unions, researchers and policymakers can use the data for accountability.

#### **Partners (2023–2025 cohort)**

- **1.** Aajeevika Bureau (India) Aajeevika Bureau is a public-service organisation serving India's informal migrant workforce.
- Cambodian Food and Service Workers' Federation CFSWF (Cambodia) CFSWF is an independent democratic trade union established in 2007 that
  advocates for workers in Cambodia's food, service and entertainment sectors.
- 3. Development Society (Bangladesh) A grassroots group advocating for women garment workers in Dhaka, working on issues like workplace safety, union rights and automation impacts.
- **4. Gabungan Serikat Buruh Indonesia GSBI (Indonesia)** GSBI is a national federation of labour unions operating across Indonesia, particularly in industrial and manufacturing sectors.
- Filipino Nurses United FNU (Philippines) A national organisation of nurses, committed to advancing nurses' labour rights, welfare and dignity as healthcare professionals.
- 6. Just Economy and Labour Institute JELI (Thailand), with the Southern Riders Association (SRA) A non-profit organisation promoting social and economic justice through labour rights protection, research and campaign-oriented trainings. JELI supports workers and labour organisations with education and capacity-building, and partners with rights-based groups to advance economic and labour justice.
- 7. Korea Domestic Workers' Union KDWU (Republic of Korea) Union representing domestic and care workers, including migrants in the Republic of Korea.
- 8. Nonoy Librado Development Foundation (Philippines) A Davao-based labour NGO advocating for informal and digital platform workers.





### The Asia Pacific Forum on Women, Law and Development (APWLD) is the region's leading network of feminist and women's rights organisations and individual activists. For over 35 years, we have been carrying out advocacy, activism and movement-building to advance women's human rights and Development Justice.

Written by: Vaishno Bharati Radhakrishnan

Based on the Feminist Participatory Action Research (FPARs) by Aajeevika Bureau (India), Cambodian Food and Service Workers' Federation - CFSWF (Cambodia), Development Society (Bangladesh), Gabungan Serikat Buruh Indonesia - GSBI (Indonesia), Filipino Nurses United - FNU (Philippines), Just Economy and Labour Institute - JELI (Thailand) with the Southern Riders Association (SRA), Korea Domestic Workers' Union - KDWU (Republic of Korea) and the Nonoy Librado Development Foundation (Philippines).

Edited and Reviewed by: Degina Adenesa, Shardha Rajam (Programme Leads) and APWLD Secretariat

Designed by: E. Maravilla

Year of Publication: 2025

This publication was produced with support from Open Society Foundations (OSF), SIDA, FJS and the EU under the WomenPower2030 Consortium.

















