



How to overcome gender bias in the Pakistani construction sector

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Pakistani construction sector.

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Registered Offices
Bonn and Eschborn

Global Project Build4Skills
Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany

Global Project Build4Skills Pakistan
GIZ Office, 2nd Floor,
NAVTTC Headquarters,
Plot No. 38 Kirthar Rd, H-9/4,
Islamabad, Pakistan

E: build4skills@giz.de
E: info@giz.de
I: www.giz.de

Editing:
INES Berlin, Dr. Tanja Schmidt,
Dr. Verena Tobsch, Hannah Schmidt,
Brenda Haas

Co-writer:
Atiq ur Rehman

Design/Layout:
indigo Kommunikationsdesign, Philine Rath

B4S-Logo:
designed by MediaCompany, Bonn
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CONSTRUCTION IS BIG BUSINESS – WORLDWIDE

Employing 220 million people, it accounts for 6% of the global share of the gross domestic product (GDP).¹

Yet, women make up only 10% of this staggering number – underscoring the common perception that the construction sector is a male-dominated field.

Asia has the most women working in this sector, while Latin America and Africa account for the least. Most of these female employees mainly hold administrative or management positions.

However, few women work on site as technicians, engineers, supervisors, or builders.



Why?

Studies show that women are held back by diverse yet crucial issues such as poverty, illiteracy, the lack of incentives (in education or recruitment efforts), gender discrimination, sexual harassment, and unfavourable working conditions or restricted promotion opportunities.

The fact is more women would be working in the construction sector if only they had the right construction sector-related training and education under their belts.

As such this paper specifically focuses on Technical and Vocational Education and Training (TVET) as well as recruitment practices, since education could play a significant role in identifying and combating gender inequalities early on.

This paper identifies the reasons why so few women work in the construction sector both globally as well as specifically in Pakistan.

It is divided into two main segments: a general overview of global trends regarding gender bias in TVET teaching and learning materials, and recruitment practices in the construction sector. This is followed up by first-hand insights of the situation in Pakistan gleaned from interviews with trainers, trainees, and employers or industry representatives.

WOMEN IN CONSTRUCTION: GLOBAL PERSPECTIVE

»Not a lack of ability but the lack of opportunity«

UNICEF

Technical and vocational education and training in the construction sector

The United Nations Children's Fund (UNICEF) has said that the low number of women working in the global construction industry has nothing to do with their lack of ability.

They are simply not exposed to or informed of their career options in this sector, and how they could train for it.

What more, the construction sector as a major global employer, faces a constant shortage of skilled workers: a shortage that could very well be filled by trained and skilled women.

This is especially true for countries such as India or Brazil where many are illiterate and rarely participate in educational training programmes. Furthermore, the construction sectors in these countries are somewhat ‘neglected’ when it comes to developing skilled workers.

One of the main reasons for these problems is limited training and high turnover rates compared to other sectors or countries due to unsatisfying working conditions. Moreover, fewer women work in construction compared to other sectors.

The structure and content of TVET in construction vary across countries. Generally, it begins with textbook learning to work-based training, focusing on hands-on learning that depends on the training path and industry sector.² According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics, the general global (upper secondary) TVET enrolment between 1999 and 2009 decreased from 28% to 24%. Regional differences notwithstanding, female enrol-

ment has almost stagnated over the years, and is lower compared to men.³

Technical and vocational education and training is also generally considered less prestigious than tertiary education. The distinction between private and public TVET institutions and their unequal funding further exacerbates the inequality between the two educational pathways, as costs also influence students' decisions to pursue such programmes.

For instance, the UNESCO/UNESCO-UNEVOC International Centre for TVET 2020 stated that data from Ghana and Jamaica show fewer female students in science, technology, engineering, and mathematics (STEM) related TVET. STEM or STEM-related TVET programmes are important, and core STEM subjects include engineering, manufacturing, and construction. Yet, only around 30% of female students pursue these fields.

Women and men also have different motives for attending these training programmes. Many generally do it either based on personal choice or family tradition, and with the hope of being paid well. According to a study of the Indian construction sector, most of the female construction workers ‘are forced to enter this field by poverty and the non-availability of any other job’.⁴

The UNESCO and UNESCO-UNEVOC International Centre for TVET has provided a framework (Table 1) analysing different factors at the personal, institutional, and societal levels that influence women's participation in STEM-related TVET programmes.⁵

¹ International Labor Organization (ILO).

² Deutsche Gesellschaft für Internationale Zusammenarbeit und Entwicklung GmbH.

³ The female participation rate of total TVET enrolment was 45.1% in 1999 and 45.5% in 2009 on average (UNESCO Institute for Statistics 2011).

⁴ For more detailed explanation of which job positions women are predominantly employed in, see section 1.2.

⁵ The personal level covers for example motives, skills, and stereotypes of individual learners as well as financial/educational circumstances in the family. The institutional level refers to the conditions within TVET institutions (teachers, material, equipment etc.) and the working environment in labour market organisations. At the societal level influencing factors are social norms and public policies within a society.

Table 1: Framework of factors at different levels influencing female participation in STEM-related TVET programmes
 (UNESCO/UNESCO-UNEVOC International Centre for TVET)

SOCIETAL LEVEL	
Social norms	Public policy
<ul style="list-style-type: none"> ▪ Mass and social media ▪ Societal and cultural norms ▪ Gender equality ▪ Inclusive social norms 	<ul style="list-style-type: none"> ▪ Equal pay legislation ▪ Gender equality policies ▪ Legislation and policies ▪ Sex-disaggregated data for policymaking
PERSONAL LEVEL	
Individual learner	Family and peers
<ul style="list-style-type: none"> ▪ Biological language and spatial skills ▪ Self-efficacy ▪ Self-perception, stereotypes, and STEM identities ▪ Interest, engagement, motivation, and enjoyment 	<ul style="list-style-type: none"> ▪ Peer relationships ▪ Parental beliefs and expectations ▪ Household financial assets ▪ Family characteristics ▪ A sense of 'belonging'
INSTITUTIONAL LEVEL	
TVET institute	Labour market organisation
<ul style="list-style-type: none"> ▪ STEM equipment, materials, and resources ▪ Student-student interactions ▪ Teachers' perceptions ▪ Female teachers ▪ Teaching quality and subject expertise ▪ Teaching strategies ▪ Physical & learning infrastructure ▪ Assessments, procedures, and tools ▪ Career awareness and information 	<ul style="list-style-type: none"> ▪ Workplace culture ▪ Employees' profile (number of female colleagues in technical jobs) ▪ Physical environment ▪ Open and hidden employer bias ▪ Perception of safety in the workplace



The table lists the various factors that affect women's decisions when pursuing a STEM-related TVET programme. Divided into societal, personal, and institutional levels, they can either separately or collectively discourage women from pursuing educational tracks and professions in the construction sector.

Several studies have also pointed to how construction sector trade unions and other training associations could have provided informal platforms where knowledge and work experience could be shared, but where women are also deliberately excluded.⁶ Conversely, UNICEF and the UNESCO-UNEVOC International Centre for TVET have reported how various programmes and initiatives such as 'Girls' Day' in Germany, 'Girls in ICT' ⁷ Day' in Jamaica or the 'Girls in ICT platform' in Rwanda positively influenced the career choices of (young) women.

However, UNICEF points out that these initiatives 'have limited reach and sustainability, mostly benefitting young women who are in well-resourced urban schools.' The hope is that initiatives like these will eventually increase the number of women in STEM-related TVET programmes.

» Young women in Sudan thought that their low math skills were due to their gender« UNEVOC International Centre for TVET

Common global trends related to TVET institutions, teachers, and training materials that need an overhaul:

- **Lack of role models:** Teaching staff are predominantly male. Thus, fewer female staff means fewer role models for female students.
- **Lack of gender awareness:** Not all teachers may have received gender awareness training and thus unconsciously (and inadvertently) reflect gender biases despite believing they are gender neutral. This could include assigning 'lighter' practical work to girls or separating girls and boys during group work. However, there are initiatives worldwide to increase the gender awareness of teaching staff in TVET institutions.⁸

⁶ Examples are Self-Employed Women's Association of India or the Trade Union of Civil Engineering, Industry and Planning of the former Yugoslav Republic of Macedonia (ILO 2015: 21; 26f).

⁷ Information Communication Technology.

⁸ For example, gender training of teachers in Mozambique, evidence from the Netherlands (Deltion College) and initiatives in Costa Rica and Ghana (UNESCO/UNESCO-UNEVOC International Centre for TVET 2020: 26).

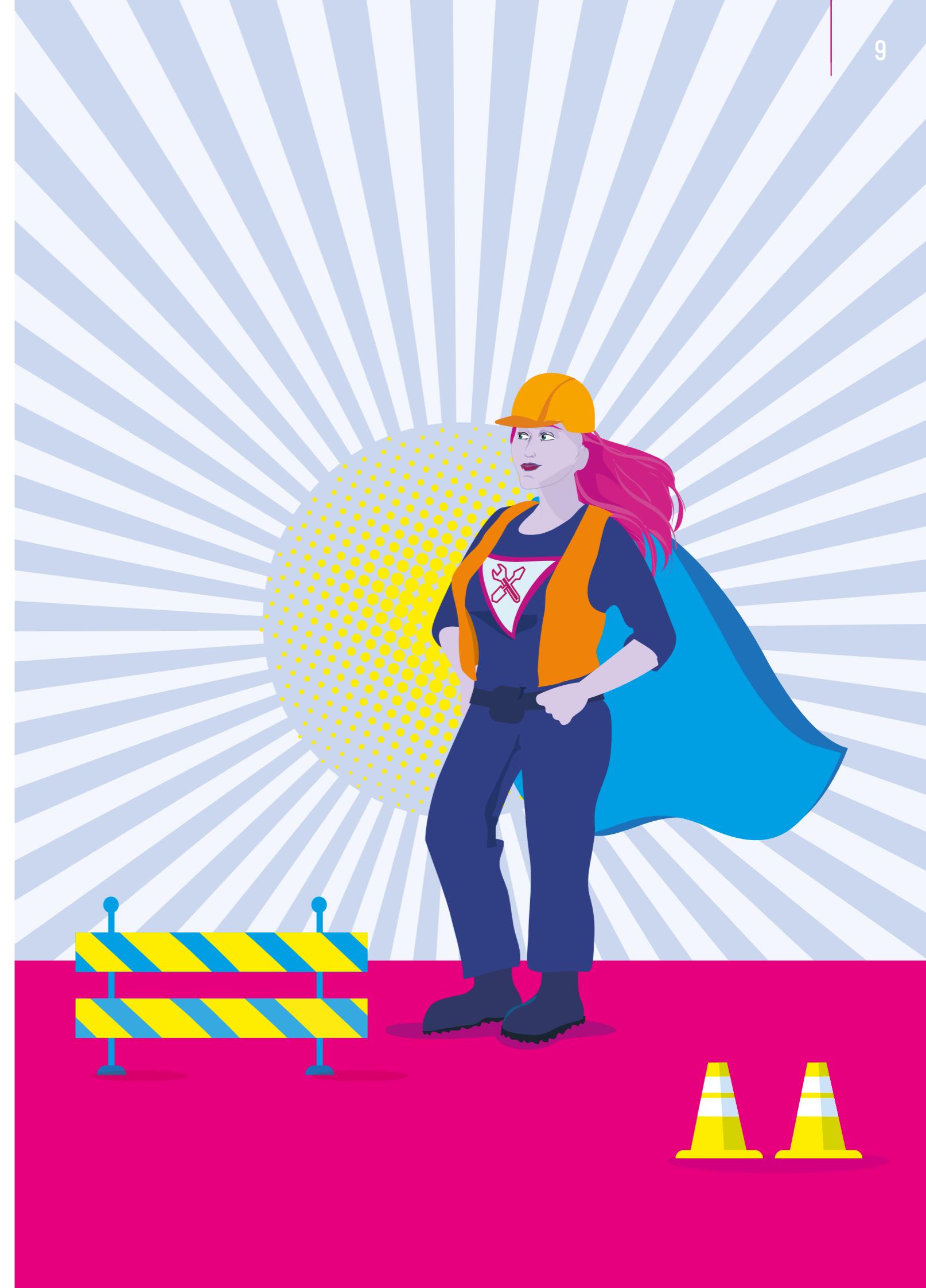
⁹ From a 2018 study by the European Institute for Gender Equality that said, "No country has achieved gender balance in vocational education."

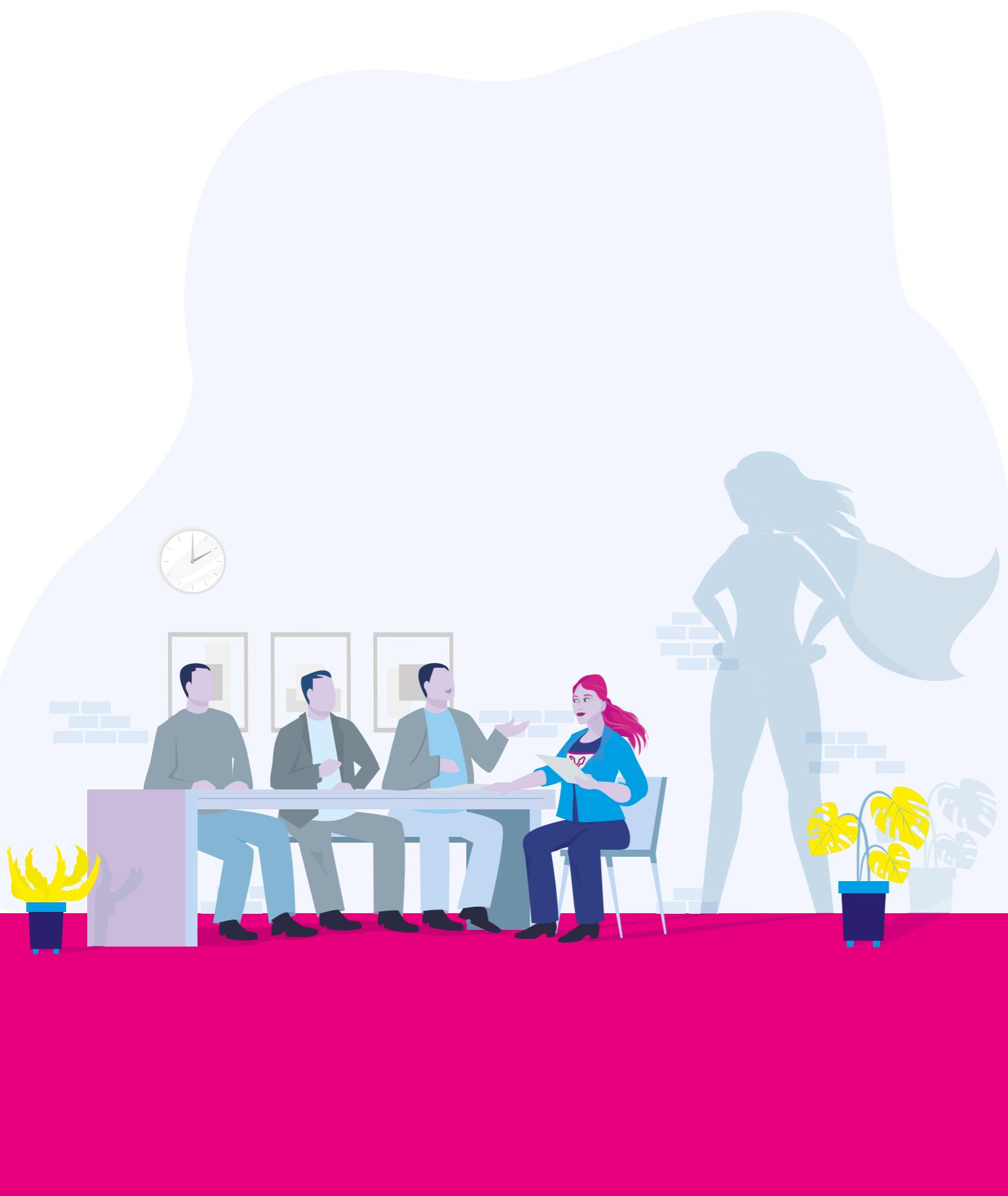
¹⁰ United Nations (UN) 2021.

- **Gender stereotyping:** This can include the lack of motivation and willingness to teach women as well as gender segregation in classes, which are especially common in STEM-related TVET programmes.⁹
- **Non-formalised TVET teaching qualifications:** Formalising/standardising qualifications will make students see STEM-related TVET teaching as a viable job prospect.
- **Non-conducive work environment:** Female staff at some TVET institutions are not even provided with basic infrastructure like gender-segregated sanitary facilities.
- **Male-centric training materials:** Most TVET training materials either do not depict women or show them as subordinates to men. Female students would identify better with certain 'male' jobs and be motivated to pursue them if they see more women doing these jobs.
- **Non-gender inclusive – or gender-neutral – language:** This refers to 'speaking and writing in a way that does not discriminate against a particular sex, social gender or gender identity, and does not perpetuate gender stereotypes. Given the key role of language in shaping cultural and social attitudes, using gender-inclusive language is a powerful way to promote gender equality and eradicate gender bias.'¹⁰

A final note: there is no 'one size fits all' teaching strategy on gender-sensitivity that can be applied in all countries.

»Open and hidden gender preferences within companies«
UNEVOC International Centre for TVET





RECRUITMENT AND HIRING PRACTICES, AND WORKING CONDITIONS OF THE FEMALE LABOUR FORCE IN THE CONSTRUCTION SECTOR

Recruitment and hiring practices in the construction sector are oftentimes informal, with the ILO citing ‘poor recruitment policies’ as one reason for general labour shortages in the construction industry.

Information about training and employment opportunities is often spread by word of mouth from those (oftentimes men) already working in the sector. Therefore, women who are already excluded from male networks, tend to lose out on getting information on TVET programmes and job opportunities in the construction sector – reflecting ‘open yet hidden’ gender (dis)advantages depending on who gains and who loses out. Getting information via the internet, television, and radio, or at career fairs or workshops can significantly increase women’s awareness of their career and training options. Expanding their access to networks of women in the construction sector or related industries could be a decisive step for them to work in this sector.¹¹ For instance, the Global Apprenticeships Network¹² that includes many construction companies, is a useful avenue for young women wanting to enter this field.”

Common global trends in the recruitment and hiring of women, and the working conditions of the female labour force that need an overhaul include:

- **Non-standardised recruitment procedures:** This lack of standard recruitment procedures also suggests that human resource (HR) matters such as recruitment, selection, performance appraisals, and promotions are dealt with by predominantly male decision-makers.

- **Common assumption that women can't do the job:** Women make up 7.5% of all construction workers in Asia.¹³ Yet the ILO says that women are often believed to be unable to do skilled construction work. Hence, many end up working as

subordinates to men, and are mainly employed in administrative and organisational office positions. Or they sell food, clean, and oversee storekeeping on construction sites like in Tanzania.¹⁴ Or they do ‘semi-skilled work’ such as carrying loads, plastering, or mixing concrete like in India.

- **Women lose out to poor infrastructure:** They are (in)directly affected by unsafe workspaces, “remote work sites, and poorly developed infrastructure and transport.
- **Inadequate facilities at the workplace:** Sites often do not provide separate toilets, showers, or changing rooms for female workers.
- **Stereotyping and sexual harassment at construction sites¹⁵:** Men and women have vastly differing perceptions of the barriers and causes of gender inequality, influenced in some cases by religious and cultural backgrounds.
- **Unequal pay for equal work:** Women are often not paid the same as men, with the gender pay gap having ‘worsened’ or ‘widened’ recently in some countries.¹⁶ Furthermore, the ILO says that in some cases, women are not paid at all if they are involved in a family network at the workplace. Figure 1 illustrates how across different income levels, there was little change in pay conditions for women between 1995 and 2015.

¹¹ One positive example is the German network ‘komm mach MINT’ (translated: “Come and participate in STEM”), Nationaler Paket für Frauen in Mint-Berufen which is also supported by the German Government (2021).

¹² Initiative of the International Organisation of Employers and the Business and Industry Advisory Committee to the Organization for Economic Cooperation and Development (OECD) (ILO 2015).

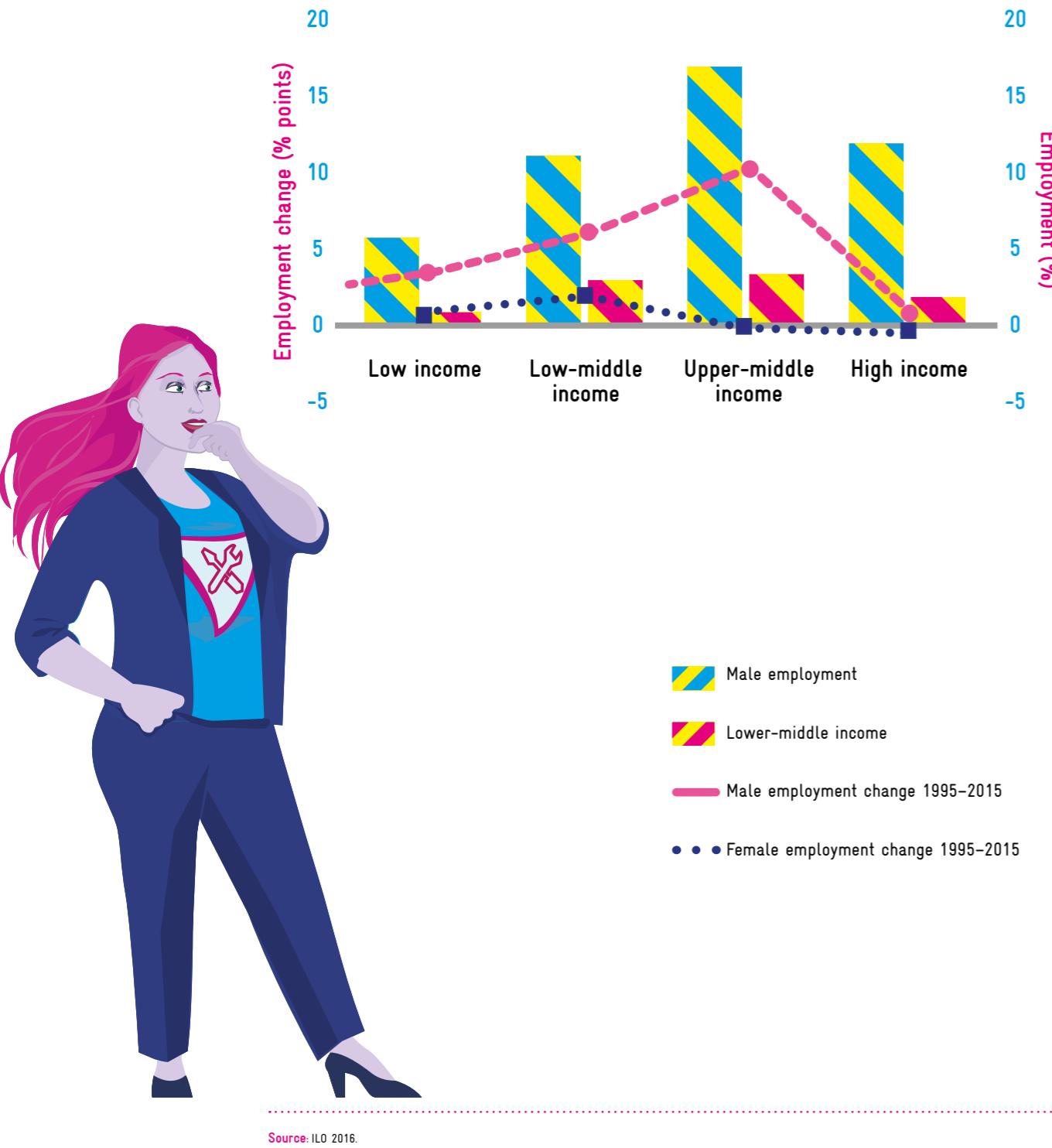
¹³ ILO 2015.

¹⁴ In contrast, ‘direct construction occupations’ (ILO 2015) that are often reserved for men include jobs like masonry, carpentry, or electricity.

¹⁵ Kaushik et al. 2014; UNESCO/UNESCO-UNEVOC International Centre for TVET 2020.

¹⁶ Build Australia 2020; Jones 2020: in Australia.

Figure 1: Construction sector employment by income groups and gender between 1995 and 2015



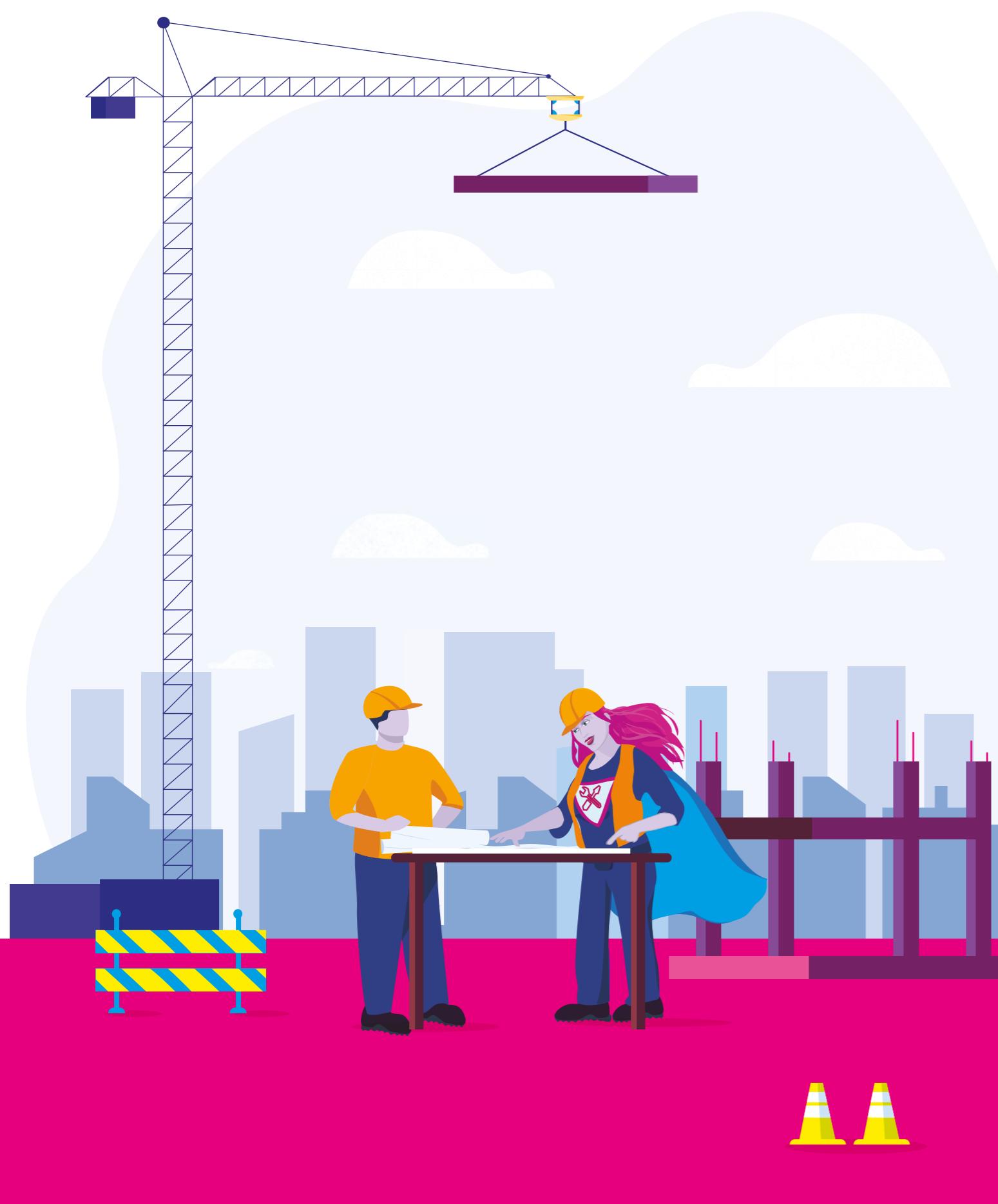
WOMEN IN CONSTRUCTION: THE ROAD AHEAD

So, how can the lucrative global construction sector successfully fill its employment gaps with highly skilled and willing women?

The following recommendations might just prove to be a win-win solution for all:

- Encourage women to pursue STEM-related TVET programmes by tackling the personal, institutional, and societal level factors that currently hold them back.
- Educate and train women in the construction sector disciplines facing staff shortages.
- Encourage women to attend vocational fairs, or to seek career guidance, coaching and mentorships.
- Improve the design and content of learning material, train instructors in gender awareness, use gender-neutral language in training and learning/teaching materials, and in job vacancies.
- Provide women with informal training and networking opportunities by establishing support systems to help them enter the workforce and expanding women-led unions, organisations or 'Girls' Days.'
- Involve more women in recruitment and hiring processes, as they are important leaders and role models for young women.
- Provide women with better working conditions like gender-segregated facilities and enforce anti-discrimination and anti-harassment regulations.
- National governments should pass and enforce gender equality laws that set hiring quotas or ensure minimum numbers of women in training programmes.
- And finally: women should receive equal pay for equal work.





WOMEN IN CONSTRUCTION: PAKISTANI PERSPECTIVE

Pakistan's construction industry employs 7.6% of the country's labour force, while the sector's GDP contribution has been estimated to vary between 2.5% and 12%. The Pakistani government has taken some steps to boost the construction sector by among others, offering tax incentives to investors¹⁷ and launching hundreds of construction projects under the Public Sector Development Programme (PSDP) 2020-2021.¹⁸ Therefore, job opportunities are plentiful in the Pakistani construction sector.

Yet, a study assessing women in TVET institutes revealed that the labour market is generally male dominated because most of the jobs are advertised for or offered to men.¹⁹ Women make up only 20% of Pakistan's labour force, and according to the Labour Force Survey 2017-2018, only 0.2% of them work in the construction sector.²⁰ Various anti-harassment laws have also been implemented in Pakistan to pro-

tect women against harassment at the workplace. One example is the Protection Against Harassment of Women at the Workplace Act 2010 which applies in the Punjab province. Similar laws have been developed by other provinces too. Therefore, laws do exist on paper to protect women and their rights.

The following sections will illustrate the characteristics of Pakistan's TVET programmes, and the working conditions for women in its construction sector.

This is based on qualitative interviews with five trainees and eight teachers from six TVET colleges, and five HR managers/owners/employers from five companies and (non)governmental institutions.²¹ Seven women and 11 men from different districts of Pakistan participated. They represent the governmental, private, and non-profit sector.

Technical and vocational education and training in the Pakistani construction sector

Generally, the formal TVET system in Pakistan consists of different vocational and technical education programmes at the upper (post-)secondary level in schools, polytechnic institutions, and colleges of technology. Non-formal education training programmes, mainly offered by independent public sector organisations play an important role, too.

According to UNESCO-UNEVOC International Centre for TVET a 'large proportion of Pakistan's

labour force is employed in the informal economy with a growing percentage of women.' In 2018-2019, women made up only 33% of a total of 471,000 TVET students – indicating how under-represented they are in these training programmes compared to men.²²

¹⁷ Federal Board of Revenue, Government of Pakistan 2021.

¹⁸ Government of Pakistan 2020.

¹⁹ In the Global Gender Gap Index 2020 rankings, Pakistan is ranked 151st out of 153 countries, thus placing it almost last in promoting gender equality (World Economic Forum 2020).

²⁰ Percentage of population of age 10 and above.

²¹ The interviews took place in Pakistan between March and April 2021.

²² Finance Division, Government of Pakistan 2020: table 10.2, page 124 of Appendices.



Regarding TVET policies, the Federal Ministry of Education, the four Provincial Education Departments and the National Vocational and Technical Training Commission are mainly responsible for standard setting, and policy implementation and coordination among the provinces. The Constitution of the Islamic Republic of Pakistan stipulates the following TVET objectives:²³

- 1)** Article 37 Clause (c): ‘...make technical and professional education generally available and higher education equally accessible to all on the basis of merit.’

2) Article 70 (4) Federal Legislative List Part I, Item 16: ‘Federal agencies and institutes for the following purposes, that is to say for research, for professional or technical training or the promotion of special studies.’

3) Article 70 Item 12, Part II: ‘Standards in institutions for higher education and research, scientific and technical institutions.’

It should be underscored that none of these national TVET objectives mention gender.

Results of interviews with teachers at TVET institutes

Eight teachers (four women and four men) from one private and five public TVET institutes²⁴, were interviewed, and their views shed light on how their own gender (possibly) influences their teaching styles and

choice of training material. They also shared their views on general teaching practices, and teaching and learning materials. Their observations can be broken down as follows:

Gender segregated classes are the norm – and still widely preferred

Pakistani TVET institutions are only partially co-educated. Classes are gender-segregated up to the level of Diploma of Associate Engineering (DAE), while

in some colleges and universities co-education systems exist in Bachelor of Technology (B. Tech.) programmes.

²³ Extracts from the constitution are quoted according to Bokhari 2013.

²⁴ These are following: Centre of Excellence/Vocational Training Institute, Kotri, Hyderabad; Government Technical Training Centre, Kahror Pakka, Lohran; Government Technology College (Women), Lytton Road, Lahore; STEP Institute of Art, Design and Management, Lahore; Government Technical Training Institute (GTI), Vehari; Government Technology College, Hyderabad.

Of all eight teachers, only one teaches a co-education class – at the private STEP Institute of Art, Design and Management in Lahore.

Only three teachers were in favour of co-education classes. They argued that this would enable female



Culture and religion strongly influence Pakistani education

Most of the teachers however said they prefer gender-segregated classes for cultural and religious reasons. Five teachers, who were against co-education classes, said that it was prohibited by social and cultural norms and religious obligations or that young women would not feel more comfortable to learn in the company of young men. These statements pinpoint strong undercurrents of gender stereotyping in public TVET institutes and reflect how culture and religion strongly influence education

students to develop abilities to work in male-dominated workplaces.

They also felt it would foster competition among students and encourage male students to take their studies seriously.



Divergent definitions about 'gender discrimination'

All the teachers said that they have never discriminated against anyone based on gender, which was predominantly confirmed by the students who were interviewed.

Yet, the teachers' preference for gender-segregated lessons reflect their perceptions of how women and men should be taught, influenced mainly by culture, religion, and stereotyping. It may also indicate that there is a lack of awareness among teachers in TVET institutes of what constitutes gender discrimination. However, in this regard, there is no discernible trend

for women or men among the teachers who were interviewed.

All the interviewed teachers are well-educated and either hold a diploma or have at least 16 years of education. They are also specialised in various fields including civil engineering, architecture and interior designing, electrical, electronics, and welding among others. However, no information is available on whether they were offered or attended gender sensitivity training specifically.



Curricula, and teaching materials and style are still male-centric

All the teachers said that they were using standard curricula, meant for both male and female students, which all interviewed students confirmed. Since construction-related education was previously male-only territory, the curricula that was used referred to men only.

The teachers said that they had developed teaching materials on their own while aligning them with the approved curricula and in line with industry practices. Furthermore, all teacher respondents stated that the teaching material they developed themselves is gender-neutral.

Three of the four male instructors said they use gender-neutral language when teaching, while the

remaining one said that he used only men in examples. He argued that since mainly men do electrical work it was appropriate to use only male examples while teaching men. This statement not only reveals gender stereotyping, but also the lack of awareness of the need to change anything about it. However, all teachers believed that they were giving gender-neutral assignments to their students.

Thus, the curricula, teaching materials, and teaching structure are still mainly oriented towards men. It remains to be seen whether this lack of gender representation will be reversed soon.

Results of interviews with TVET institute students

Three female and two male students from six Pakistani TVET institutes were interviewed on their perceptions of possible gender bias in the curricula of training programmes, in the classroom, and in teaching and learning materials.

Since there are generally very few female trainees in the construction sector in Pakistan and so, students in advanced training programmes (where there are more women) were interviewed for this report. Their observations can be broken down as follows:



Families do not influence career paths



Contrary to some global trends, these students were not influenced by their families when choosing their career paths. Both the male students were enrolled in Diploma of Associate Engineering (DAE) programmes at the Government College of Technology, specialising in civil drafting and electrical engineering. Of the three female students, one had recently done DAE in Electronics, one graduated in Architecture and Interior Designing, and the third was in the 5th semester of a degree programme in Architecture and Interior Designing.

Both male students said that they signed up for the DAE because they wanted to work abroad, adding

that they were inspired by friends who were living abroad. All three female students explored their career options on the internet; one however also got guidance from her friend.

These insights are consistent with global trends that students primarily pursue educational pathways through informal channels (in this case, mainly friends). Additionally, the male students' intention to go abroad could be an indication that they are dissatisfied with the working conditions in Pakistan or are hoping for better opportunities abroad. This again mirrors the global trend of the lack of skilled workers available locally due to economic migration.

»The visiting teachers were very helpful. They brought practical knowledge directly from the field to the classroom. We learned about the opportunities available in the industry. She was quite inspirational.« Female student

This statement highlights the relevance of career guidance provided by teachers, and especially to women. There were also no complaints about deficiencies in sanitary facilities.

Gender does not affect course admissions



Except for one male student, none of the trainees faced any difficulty or competition in getting admission into their chosen programmes.²⁵ The male student who faced difficulties said that competition was tough among applicants, and so he had to make two attempts to secure an admission. The female interviewees however claimed that they did not experience any discrimination or problems due to their gender.

The male students said that they were not interviewed during the application process. Of the three

female students, two said that there was an informal interview conducted by female teachers where they were asked about family background, and personal interests etc.

However, they didn't feel discriminated against. The remaining female student said that she had to pass an aptitude test on top of the interview. She stated that the interview panel consisted of a male and a female teacher. Accordingly, no gender inequalities in the application process can be identified.

Learning environment is generally conducive



All the students described the general working and training atmosphere as 'good', with none pointing out any issue of discrimination. Their statements are in line with those of their interviewed teachers. All interviewees said that their teachers had created

a friendly class environment and treated them well. Three added that their teachers had provided them opportunities and valuable guidance. Visiting teachers were rated highly, primarily because of their industry exposure and practical experience.

Divergent minority views on co-education and teaching materials



As mentioned earlier, classes are often gender-segregated. One of the female students however said that she would prefer a co-ed system.

»The construction sector is dominated by men. If they [female students] want to learn to work with them and develop the ability to handle difficult situations, then they should use co-education as an opportunity to learn.« Female student

Nevertheless, when different teaching materials were studied, they showed only pictures of men, which in turn could negatively affect women's identification with certain professions. The question remains if awareness of this form of gender discrimination has been raised during class.

²⁵ According to the consultant and the conducted interviews, 10 years of education is a minimum requirement for admission into the DAE programme, which in turn is a prerequisite for admission into the B. Tech. degree programme. Unlike a DAE programme, getting admitted into a B. Tech. Programme is highly competitive. This is because very few institutes offer the B. Tech. programmes and seats are limited.

RECRUITMENT AND HIRING PRACTICES, AND WORKING CONDITIONS OF THE FEMALE LABOUR FORCE IN THE PAKISTANI CONSTRUCTION SECTOR

Results of interviews with human resources managers of construction companies

Interviews were conducted with a human resource manager, a construction business owner, two project engineers, and a government officer – all of whom were men. Working for either private companies or (non-)governmental institutions, they shared their

views on the hiring processes for women and men in the Pakistani construction sector.

Their observations can be broken down as follows:

Female employees are paid less than their male colleagues

Generally, there is a gender wage gap in the Pakistani construction sector.²⁶ Construction sector employees are paid a daily rate. Construction site workers receive a standard rate of Pakistani rupee (PKR) 800-1,000 a day. The average salaries of professional staff range between PKR 30,000 and PKR 400,000.

Since none of the respondents had any female staff on their projects, comparisons couldn't be drawn

between the salaries of men and women. However, this can be done in some office-based positions where women are also employed. For example, a female Computer Aided Design (CAD) operator/technician earns PKR 50,000 per month, while her male counterpart receives PKR 70,000 per month.

One male interviewee explained this wage disparity thus:

»The difference is because the man can visit project sites while female technicians stay in the office.«

Male respondent

This statement points to gender stereotyping and highlights what has already been identified as a global trend: that women are more likely to be employed in

desk-bound positions while men are given management positions at construction sites.

Women are not considered for leading jobs on site

Women mostly work as labourers in brick kilns, while very few occupy skilled or managerial positions. However, there is no exact data on the positions women have within the construction sector.

Two of the private sector respondents said that women tend to be recruited as CAD operators, architects, designers, planners, and electrical engineers. They added that construction companies do hire female staff for marketing and reception, and that there is a growing trend of having female staff on marketing teams. Two respondents said they had women in such jobs. The respondent from the government construction sector said that female engineers held managerial positions in their department. None of the private sector employers had any female staff working on project sites.

The reasons given as to why women are not hired indicate stereotyping and discrimination, making it clear that women are not trusted with certain tasks. For example, one respondent stated, 'Women could not supervise field staff, they lack people management skills.' The responses of the interviewees suggest the wide belief that women cannot perform well in supervisory positions. Some of the reasons given for not hiring any woman for jobs on site include the belief that women would not feel comfortable working with men on the field, or that site conditions would be very difficult, tough and rough on women. It can be concluded that this mindset would most probably also influence recruitment processes, and that women do not get hired for the jobs they apply for because of gender discrimination.



²⁶ This is also generally true for Pakistan according to data on major occupational groups of 2017-2018, see Ministry of Statistics, Pakistan Bureau of Statistics 2018: 41.



Gender bias already begins at the application stage

According to the interviews, gender bias already seems to start with the application processes – whether for full-time jobs or internships. One private sector

employer said that only three women had applied for internships at his company.

»Three women applied for internships with our company, two civil engineers and one electrical engineer and have completed their internships.«

Male respondent

However, a circular argument arises here, as clear statements have been made confirming that women are not selected for specific positions (mainly leading positions on construction sites) anyway.

The interviewees also said that women tend to apply only for certain positions and remain strongly under-represented in the respective companies. On average, women account for only 1 to 2% percent of all job applicants.

»No woman has ever applied for any engineering field job to our company.«

Male respondent, private sector company

Respondents of two private construction companies said that they had received applications from women for different technical positions (including CAD operator, designer, and electrical engineer), and selected women to fill those positions, too. However, in the government sector, female civil engineers work at different officer level positions.

Hiring and selection panels are mainly male

New employees are generally recruited via formal and informal channels. These include referral systems, applicant databases, social and professional networks, and advertising on social and print media. All the private companies interviewed said that they also use word-of-mouth as an informal recruitment method.

The recruitment criteria and hiring processes can be classified as partially standardised. Candidates are commonly selected via job interviews. In the private sector, there is usually an informal selection commit-

tee – whose members can change according to project, position, and situation. Usually, it consists of a company owner/director, a project manager, and a project engineer. None of the interviewed companies has had a woman on its selection committee.

Therefore, it can be assumed that gender-specific decisions are made by predominantly male decision-makers. And underscores the need for more women to be involved in the selection process – if anything, to encourage other women to work in the construction sector.

Hiring processes lack formality

Half of the respondents said that they conduct two interviews: one by an administration or HR staff and a project engineer, and second by the company's owners or senior managers. These facts underline the informality of the hiring processes in the construction

sector, echoing the global trends on HR practices.

Furthermore, the interviewees said that no formal induction programmes exist in the private sector. Only experienced staff are hired:

»We select only experienced and skilled people. We make assessment of their skills during interviews. However, in case we have to hire a fresh graduate, then we attach him with any experienced person.«

Male respondent

Usually, this lasts between one month and three months. While the interviewees claimed not to differentiate between male and female attachment employees, women are generally not attached with field engineers or project managers. This lack of hands-on exposure then makes women less attractive as all-rounders for leading positions such as engineers and managers.

Communication skills, previous salaries, and behaviour are also assessed. However, staff behaviour is given more attention in supervisory and managerial positions. This could then suggest that discriminatory behaviour on construction sites is not subjected to disciplinary procedures.

All new staff undergo between three to six months of probation, and progress reports on field staff is done on a daily, weekly, and monthly basis. However, the data is not used in any standard way to rate staff performance. Therefore, no standardised processes exist in this regard either.

»If anyone with required education, skills and experience is available, and his performance was also good in previous projects, we give him that role.«

Male respondent

Responses reflect the reality that some jobs are 'automatically male' that even HR officers do not consciously use the female pronoun – or the more neutral 'he or she' – in general statements.

Once again, the argument that women are not discriminated against in terms of promotions must be viewed critically since they are not already considered for the jobs in the first place.

It is also worth noting that the use of the male pronouns (he/him) in some of the interviewees' re-

Staff appraisals and promotions lack structure

Although educational qualifications and work experience are among the basic selection criteria, performance appraisals and staff promotion systems cannot be characterised as standardised or as specifically geared towards gender equality. Only two respond-

ents (from the private sector and government) reported having structured performance appraisal systems. Nevertheless, the length of field experience, the number and nature of projects as well as competence in technical areas are the most important criteria.

»We clearly differentiate between field experience and office-based experience. We prefer those who are living in the city where the project is being executed.«

Male respondent

Women generally face non-conducive working environments on site

An officer of the Buildings Department of the Punjab government said that because of anti-harassment laws,

the environment in their department and in field offices was safe for women.

»The anti-harassment laws are very strict. No one can dare to harass any woman at the workplace. Rather, men remain extra careful to avoid any situation which can be construed as harassment.«

Male respondent



However, it is interesting to note that while this law has a deterrent effect in the public sector, it is perceived as ineffective in the private sector. This is because public sector staff have job security and therefore harassed women can lodge complaints without fear of repercussions. In the private sector however, women avoid lodging complaints for fear of losing their jobs.

All respondents claimed that they had an overall 'good' working environment in their organisations. However, three of the four private sector respondents said they have 'non-favourable' working conditions – namely, no separate facilities for women on project sites.

»The threats and incidents of harassment are common at workplaces.« Female student

Segregated toilets are available for women only in company offices. But this isn't the case for site offices where women do not have separate washrooms and rest rooms. One statement expresses that if women are hired, then the companies would have to provide them with transport, accommodation, and all separate facilities at project sites. These observations are in line with global trends.

It was also commonly agreed that the working environment for women on project sites was very hostile.

»Women at workplaces are subject to staring and different forms of harassment. Situation on project sites is more problematic as illiterate workers are there.« Female student

A male HR manager however said that it is a myth that construction workers are notorious for harassing women. He further explained:

»The fact is that people are not bad, construction workers are rather more sensitive to the social values. They don't harass women. The problem is that this allegation is used as an excuse for not allowing women to work in construction sector. The fact is the male ego of fathers and brothers comes into play. I believe that women can visit markets to procure material, exactly the way, most of the women do shopping in markets. You see all markets are dominated by men. So, it is totally wrong that if a woman engineer visits a market for procuring material, she will be subject to harassment. The truth is, no businessman can even think of destroying his image in the market by harassing any customer. Some individuals might act badly but social pressure keeps them in check.« Male respondent, HR

All in all, after analysing the recruitment and hiring processes in Pakistan, a twofold picture emerges. The interviewees themselves admit that stereotyping is common when selecting employees and that women are not considered for certain positions. Yet, they claim that women and men are treated equally, and that the working atmosphere is good.

The fact remains though, that women are under-represented in the construction sector, are paid less, and have access only to certain jobs: all of which amounts to gender discrimination.

WOMEN IN CONSTRUCTION: THE ROAD AHEAD IN PAKISTAN

Based on all the findings above, the following measures could contribute towards overcoming gender bias in Pakistan's TVET teaching and learning

materials, improve gender parity of applicants, and help trainees successfully graduate and work in the construction sector regardless of gender:

List of recommendations:

- Establish specialised training institutes for construction-related trades in every district to expand training and education opportunities for women.
- Awareness campaigns and career counselling should be targeted at young women and their parents to avoid family objections to them working in construction.
- Use media campaigns to create awareness about job opportunities for women in the construction sector to remove common social prejudices about women doing these jobs.
- Publicise success stories of women in the construction industry.
- Improve training quality, and TVET institute courses in civil engineering, architecture and interior designing should be run on a public-private partnership model to ease women's entry into these courses.
- Construction companies, and private and public construction projects should encourage women to join them as interns. Government projects can also easily offer internship opportunities to women.
- Women can be hired for jobs related to planning, designing, architecture, interior designing and environment.
- Anti-harassment laws should be widely publicised and strictly implemented.

Why not become a role model myself?



APPENDIX

Index of Abbreviations

GDP	Gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit und Entwicklung (GIZ) GmbH
HR	human resources
ICT	Information Communication Technology
ILO	International Labour Organization
LPGE	Law on Promotion of Gender Equality
MNT	Mongolian tugrik
NSO	National Statistics Office of Mongolia
OECD	Organization for Economic Cooperation and Development
PCC	Polytechnic College of Construction
STEM	Science, Technology, Engineering and Mathematics
TVET	Technical and Vocational Education and Training
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEVOC	UNESCO International Centre for Technical and Vocational Education and Training
UNICEF	United Nations Children's Fund
VTS	Vocational Training Schools

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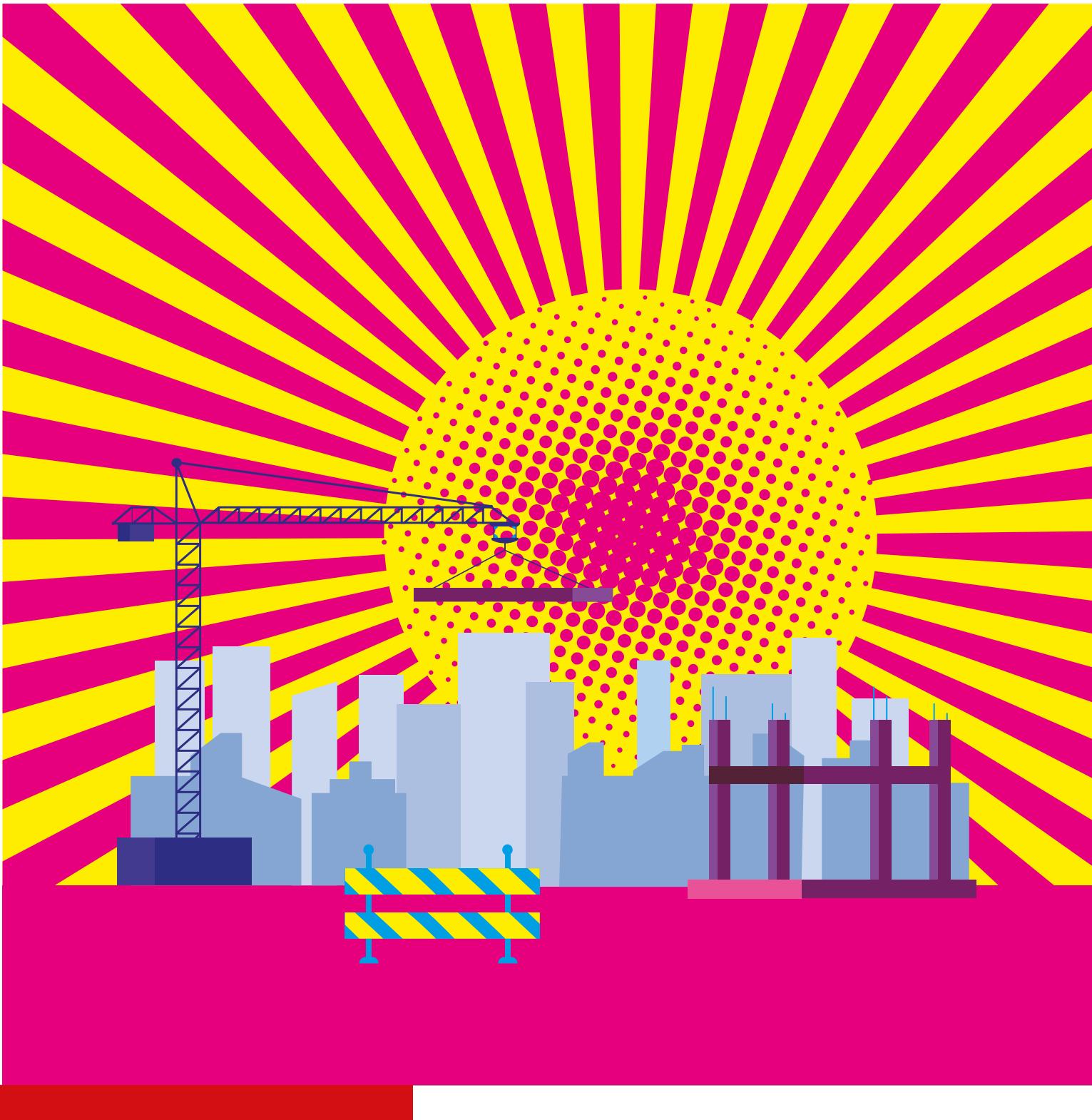
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Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered Offices
Bonn and Eschborn

Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T +49 228 44 60-0
F +49 228 44 60-17 66

E info@giz.de
I www.giz.de



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