



International
Labour
Organization

Women in STEM workforce readiness and development programme in Indonesia



DONOR

J.P. Morgan Chase Foundation



DURATION

September 2017 - December 2020



COVERAGE

Indonesia



FOCUS

Information, Communication, and Technology (ICT)



BENEFICIARIES/
PARTNERS

Sectoral business associations, private sector firms, TVET institutions, social partners, and relevant public ministries and agencies.



OBJECTIVES

- (1) Improve enrolment and school-to-work transition of women from STEM related TVET programmes to the labour market and with this prepare women for the future of work.
- (2) Strengthen retention and advancement of female workers in STEM sectors and with this mitigate their risk of being displaced by automation.
- (3) Increase labour productivity and with this improve living standards of women.



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The programme seeks to provide women with critical soft and technical STEM related skills to help women gain quality employment and support career advancement of women in the ICT sector in Indonesia.

► Programme background

Over the next two decades, technological advances including automation and robotics, will significantly change jobs and enterprises in Indonesia. The ILO estimates that 56% of employment (over 60 million jobs) face a risk of automation in Indonesia.

Female are employed predominantly in jobs requiring low STEM (Science, Technology, Engineering and Mathematics) skills, which are clearly at risk of automation. Women are 20% more likely than men to lose their job as a consequence of automation.

To address these issues, and considering the national economic and social development priorities, the ILO identified the ICT sector as a high-growth sector in Indonesia, presenting significant projected STEM-related skills gaps and opportunities for growth for women over the next decades.

Female employment in these sectors is currently very low and concentrated in low-skilled occupations. To change this, the ILO programme aims to improve women acquisition and adoption of critical soft and technical STEM-related skills for these sectors and, in this way, contribute to reduce the skills mismatches that are affecting workers' productivity and enterprises' competitiveness in this rapidly changing context.

Productivity is a key source of improved living standards for women and also a major contributor to economic growth. Therefore, to improve productivity and prevent women from losing their jobs as a consequence of automation, the ILO programme seeks to strengthen

linkages between private sector firms, social partner institutions, and vocational training centres to ensure greater opportunity through higher entry, retention, and advancement of women workers in STEM-related positions.

► Target beneficiaries

The Women in STEM Programme aims to empower, connect, and support career development of three groups of women in target sectors:

- 1 Underprivileged female secondary or post-secondary TVET graduates.
- 2 Low-skilled women working in entry level STEM-related jobs.
- 3 Mid-skilled women working in STEM occupations.

► Main activities

1. Skills gap identification

Consultation with sectoral business associations, private sector firms and social partners to identify and prioritize industry specific skills and occupational needs and with this develop action plans for skills development in the ICT sector. The design of a training plan and subsequent curricula seeks to be demand oriented and include industry-specific STEM related skills development and employability plans for women.

2. Skills upgrading

Upskilling and broadening critical soft and technical STEM-related skills, targeting female graduates, low-skilled, and mid-skilled working women by offering them a different type of training:

- (a) Pre-employment technical and employability skills for TVET graduates to facilitate their entry into full-time jobs;
- (b) Skills upgrading for those who are already in employment but in low-skilled jobs with limited mobility to expand their career prospects;
- (c) High-end technical skills, or leadership and managerial training for those who are already in supervisory or mid-skilled positions.

3. Job placement

Maximize job placement through continuous collaboration with private sector throughout programme implementation.

4. In-company development and mentorship

A programme of company-level peer support and mentorship organized by and within participating firms. The in-company development and mentoring seeks to strengthen retention and advancement

of women workers through a comprehensive workplace-based learning programme to boost critical soft skills.

Participating firms will benefit from an innovative learning approach designed by the ILO to deliver soft skills training, leveraging peer learning networks to support development, growth, and enhancement of enterprises.

The ILO *In Business* training methodology offers private sector firms a suite of training modules that apply activity-based and peer learning designed to empower female employees and connect them with role models and mentors. Topics for *In Business* modules include: Vision setting and professional development, Creative thinking, Problem solving, Teamwork, Reaching consensus, Interpersonal communication, Public speaking, Critical thinking and reasoning, Time management and self-organization, Starting to manage, Leadership, Personal awareness, Working across cultures, and Managing upwards.

► Expected outcomes

Women in STEM sectors face a variety of challenges that reduce entry, retention, and career advancement in these sectors. Therefore, the ILO needs to:

- 1 Successfully transition underprivileged female vocational school graduates into STEM-related employment with sustainable career and livelihood prospects;
2. Successfully transition women in low-skilled jobs to quality STEM-related employment with sustainable career and livelihood prospects;
3. Successfully transition mid-skilled women in STEM fields into leadership and management positions to ensure women not only enter, but also stay and get promoted in STEM fields.

