



# WOMEN IN MANUFACTURING

Skilling, Reskilling, and Upskilling Women to Bridge the Manufacturing Workforce Gender Gap





## Introduction

Manufacturing has over the last five years contributed between 7-9% to Kenya's Gross Domestic Product (GDP). This contribution is expected to rise to 15% by 2020 (KNBS, 2020). According to Kenya's Economic Survey Report (2020) most of the employment opportunities in the manufacturing sector are informal. Only 12% of formal employment opportunities were created by the manufacturing sector in 2019. While these numbers are not disaggregated by sex, Kenya's economic survey shows higher male labour participation in the manufacturing sector than females (KNBS, 2016). This policy brief outlines the factors that impact on women's skillsets at different levels and requirements for policy changes towards a gendered workforce that is skilled and well equipped with the requisite knowledge.

## Background

Women constitute 50% of Kenya's population, and there is increased recognition of their contribution to economic growth and development. While Kenya's female labour force participation was relatively high, (72%) in 2019 (Global Economy, 2019) most of this participation is in the informal sector. Several determinants to women's full participation in the workforce exist and much needs to be done to address these barriers. Manufacturing is seen as a huge driver of developing economies in the global south but the employment of women in this sector remains low (WEF, 2016). This low participation of half the population in a key sector of the economy not only impacts the lives of women but also affects the ability of the country to achieve its development goals.

Workforce participation of women remains suboptimal in many developing economies due to social, economic, and policy-related factors. The gaps in the skillset of the female workforce is a leading factor to their being disadvantaged, disenfranchised, undervalued, and ultimately underrepresented in the manufacturing sector (IMF, 2019). The lack of an adequately skilled female labour force contributing to the manufacturing value chain entrenches the false perception that manufacturing is a preserve for men. There is therefore a need for deliberate efforts to address the inhibitors to women's advancement in the industry and enhance existing and new growth opportunities using a gendered lens.

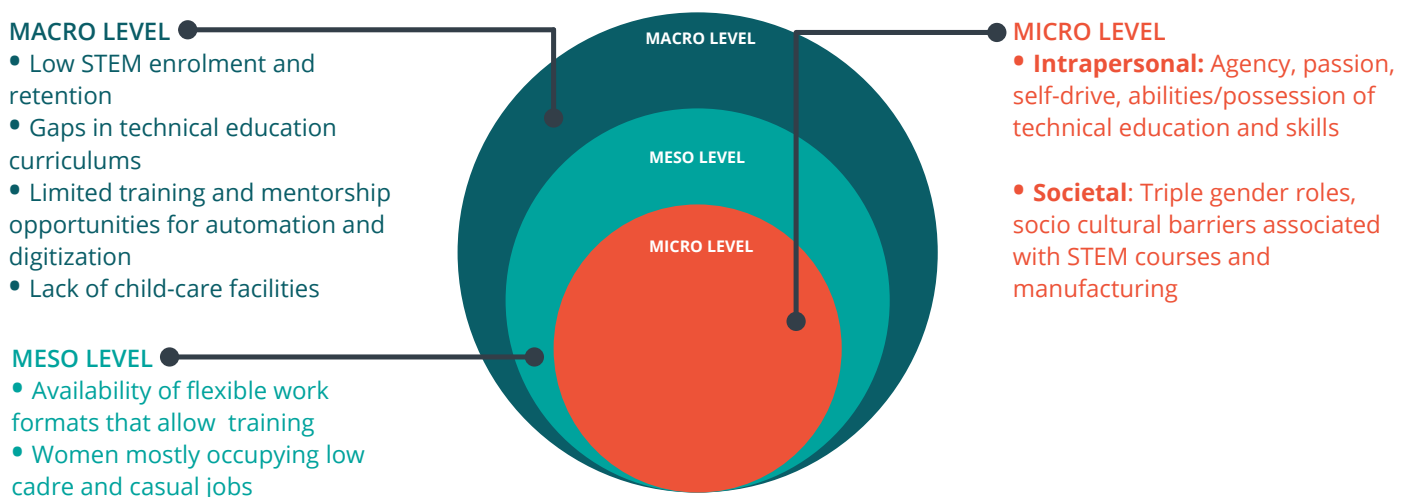
The advent of the future of work signifies a great shift to the adaption of advanced technological approaches to production. Manufacturers will seek employees who possess market-relevant skillsets and talents (Deloitte 2016). This technological advancement compounds women's employment vulnerabilities as they tend to be less skilled than men in the technical areas required for

manufacturing. It is key for women to position themselves for these changes by skilling, reskilling, and up-skilling for relevance, competitiveness, and increased participation in the sector.

## Women in Manufacturing: Mainstreaming Gender and Inclusion

In 2019-2020 the International Center for Research on Women (ICRW) and the Kenya Association of Manufacturers (KAM) conducted a mixed-methods study to gain insights into the status of women in manufacturing and the context in which they operate as leaders, owners, and employees. The findings revealed the lack of appropriate skillsets as a contributor to the continued alienation, devaluation, and low participation of women in the manufacturing sector. This lack of technical knowledge and expertise has resulted in most women taking up lower cadre low skill jobs which translate to low earnings and poor career advancement. The study also revealed existing gender gaps during enrolment and retention across STEM programmes in institutions of higher learning as well as in the vocational skills TVET programme. The poor uptake, retention, and completion rates of women result in an almost non-existent pipeline of women training towards building a career in manufacturing sector.

Barriers to skilling and upskilling of women cited through this study included low education level, inadequate subject selection in school and limited access to training in appropriate courses and programmes. Women require training in areas that they have traditionally been exempted from to respond to the changing needs of society and the manufacturing sector. Figure 1 presents factors found to influence women's skillset in the manufacturing sector at micro, meso and macro levels.



**Figure 1** Factors influencing female workforce skillset development in manufacturing

## Policy recommendations for bridging the gender skills gap in the manufacturing sector

### Revitalize technical education for girls and women

Women are underrepresented in professions that are critical for the manufacturing sector such as Science, Technology, Engineering and Mathematics (STEM). Since 2015 there has been a gradual increase from 24% to 43% in the enrolment of girls in technical and vocational training programs (TVET). Data on the proportion of those undertaking courses that are directly linked to manufacturing and training completion remains unavailable. To address the gender gap in access, enrolment in technical training, retention, and completion of STEM programmes and TVET courses, policy strategies for increasing STEM education and proficiency for girls starting in elementary schools are necessary. Efforts should be made by the Ministry of Education to facilitate enrolment of in STEM using affirmative action quotas. Existing technical education curricular and mode of delivery should be adapted to suit the dynamic needs of women and girls. Manufacturing stakeholders should engage in identifying opportunities to facilitate early and positive exposure to young women and girls through mentorship.

### Design and scale-up of apprenticeship models for manufacturing sector

Collaborative efforts across various sectors under the leadership of the Government towards the development of a dual education and apprenticeship model should be explored. This model will ease the transition between technical education) and the workforce and catalyze women's entry and advancement in the sector by providing them with on-the-job skills training. An apprenticeship model serves to create a platform for girls and women to establish professional connections with coaching and mentorship opportunities, understand skillset expectations, and address any negative perception towards manufacturing while they pursue their formal education.

### Reskilling and upskilling at the workplace

Targeted reskilling and upskilling could accelerate gender diversity and inclusion. While hiring more women in manufacturing is imperative, hiring alone may not fulfil the skills the business needs to succeed. To reinforce their talent pool, manufacturing companies need to practice a combination of hiring, training, and upskilling. This should become a priority to enable companies to grow and retain the female workforce. Introduction of targeted skillset evaluation programmes against the companies areas of operation also allow companies to undertake targeted trainings and is central to the ability of manufacturing firms to design on-job training programs that will guarantee the acquisition of requisite skills by women employees

### Fortifying the right skills

In this data-driven era, being fluent in the "language of data" gives manufacturing companies a significant edge on their competitors. Women will be disproportionately affected by the digital transformation. Understanding the role of new technologies and developing skillsets around them is therefore paramount. Identifying the training methods that work best for female employees and that will take into account their differential competency and time constraints is vital.

### Balancing training and women's triple gender roles

To enable women to attend to both training and their triple gender roles, it is important to set up child-care facilities near the training sites. Reskilling training programs should also offer flexible formats, so that female employees with jobs and competing household responsibilities can manage the workload.

## Conclusion

There is empirical evidence on the value-based case for gender inclusion and the accompanying economic imperative for enhancing the participation of women in manufacturing settings. The manufacturing world is getting faster, more specific, and more competitive. Manufacturing companies will rely on their workforce to adapt to the changing environment to for them to survive and succeed. Education, reskilling and upskilling of women employees is therefore not an option but a necessity for their continued contribution in this sector.

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