

► Brief

February 2025

Towards a skills strategy for the textile and garment industry in Viet Nam: Sector analysis, priority skills needs, actions, and recommendations

► Key points

- ▶ Viet Nam's textile and garment industry has experienced significant growth and made substantial economic contributions to help drive national development, including through the creation of millions of jobs, particularly for women.
- ▶ Job quality in the sector is improving as informality levels decline. Some Decent Work deficits remain, partly due to features of global value chains (GVCs) that result in high shares of temporary employment and excessive working hours. This often translates into some enterprises' non-compliance with labour laws and standards, particularly occupational safety and health (OSH), that leaves workers and particularly women exposed.
- ▶ Real wages are growing, but slower than the manufacturing average leading to competition to attract workers. Labour productivity and profit margins remain low, dampened by the large share of micro, small and medium-sized enterprises (MSMEs), primarily operating under the cut-make-trim (CMT) production method.
- ▶ There is a significant divide between foreign direct investment (FDI) enterprises, which comprise the majority of large sectoral players, and domestic firms in terms of technological adoption and innovation, productivity, and profitability.
- ▶ The textile and garment industry has reached the crossroads. Looking ahead, there is a critical need to enhance productivity and shift its growth model toward sustainable development, green practices, and technological innovation (including digital transformation). Doing so requires addressing the structural challenges along the value chain, which also necessitates a workforce with the skills to drive this transition forward.
- ▶ To realize this transformational change, this brief recommends a number of key steps, including optimizing the policy environment, industry and training linkages, the relevance of training programmes, inclusive and gender-responsive education and training policies, quality assurance of training, industry participation in skills development, and financing for sector-specific skills and training. Additionally, it identifies business capability gaps, skills implications, and highlights priority skills and interventions for key occupational groups in the short, medium, and long term.

► Sector analysis

Over the past 40 years, Viet Nam's textile and garment industry has experienced robust growth and made significant economic contributions. This has created millions of jobs, primarily formal wage employment, particularly for women, with higher incomes also helping reduce poverty. Despite these impressive steps forward, amidst evolving global trends, the industry now requires a step change to upgrade its value chain and shift towards a more sustainable and competitive development model. To realize this transition, enhancing workforce skills is crucial.

The research¹ summarized in this brief² spotlights the industry's achievements, opportunities and challenges to its continued development in the context of increasingly deep international integration and participation in GVCs. This analysis informed policy- and decision-makers, social partners, sectoral stakeholders, education and training actors, textile and garment enterprises, and relevant research institutes to identify priority skills needs and actions needed to drive the industry's transformation and sustainable growth.³ A combination of quantitative and qualitative methods was used, including analysis of data and information from multiple sources and stakeholder consultations, including sectoral stakeholders, in line with the International Labour Organization's (ILO) Skills for Trade and Economic Diversification (STED) framework.



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Business development and industry characteristics

Viet Nam's textile and garment sector integration into GVCs followed the "Doi Moi" reforms and efforts to increase international integration since the early 1990s. The industry made significant strides in the subsequent decades, attracted substantial investment including foreign capital, expanded production and saw its export turnover surge, reaching US\$44.4 billion in 2022,⁴ accounting for nearly 12 per cent of national export turnover, before dipping to US\$ 39.5 billion in 2023, and reached approximately \$44 billion in 2024.⁵ To date, Viet Nam-origin textile and garment exports can be found in

104 countries and territories worldwide.⁶

As a key economic sector, prioritized by the State to attract domestic and foreign capital, the textile and garment industry has seen its production and business capital increase sharply in recent years. This is evidenced by a growing workforce and the number of enterprises doubling since 2012, surpassing 14,000 in 2022 with MSMEs comprising nearly 90 per cent, as reported by the General Statistics Office (GSO).⁷ Micro enterprises of less than five employees witnessed the fastest growth from 19 per cent of enterprises in 2012 to 40 per cent in 2022. Firms are mainly concentrated in the Southeast region (50 per cent) and Red River Delta (30 per cent), with recent expansion to central provinces (Nghe An, Thanh Hoa), the

¹ ILO and VITAS, 2025. *Skills for Trade and Economic Diversification: Analysis of the textile and garment industry in Viet Nam*.

² The brief was developed under the project "Future of Work in Textile and Clothing: Forecasting and Developing Skills in Viet Nam to Advance Decent Work and Productivity in the Sector" with funding from the Governments of Japan and the Netherlands. <https://www.ilo.org/projects-and-partnerships/projects/future-work-textile-and-clothing-forecasting-and-developing-skills-viet-nam>

³ ILO and VITAS, 2025. *Towards a sector skills strategy for Viet Nam's textile and garment industry: Priority skills needs, actions, and recommendations for education and training system*.

⁴ VITAS (Viet Nam Textile and Apparel Association) reports US\$44.4 billion. According to International Trade Center (ITC), it is US\$45.4 billion.

⁵ VITAS.

⁶ VITAS.

⁷ GSO, Statistical yearbooks, 2013-23.

Mekong Delta, and Northern Midland and mountainous areas.⁸

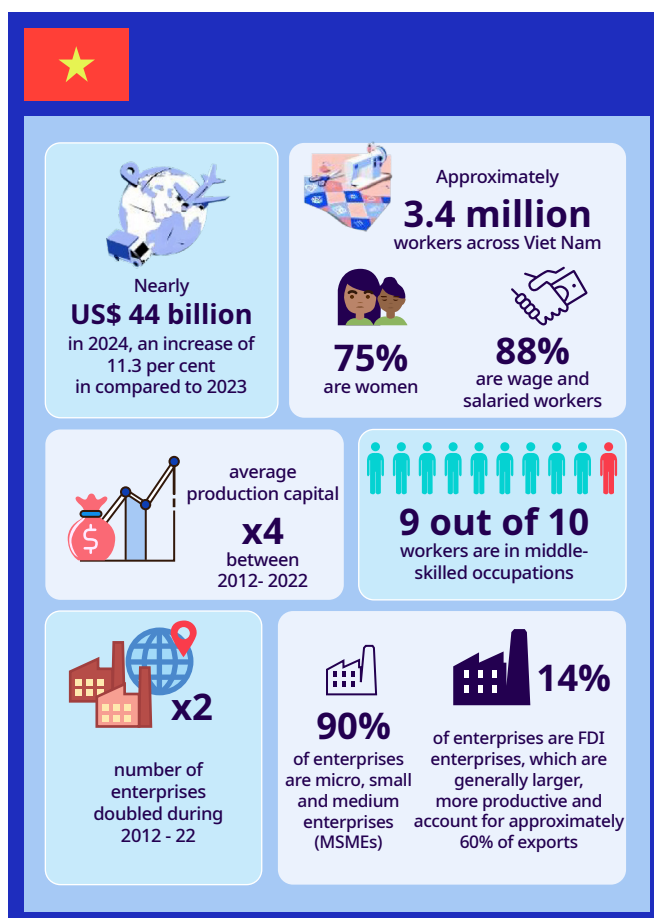
Despite high growth, labour productivity in Viet Nam's textile and garment sector remains low compared to the manufacturing average, and that of some export competitors. Textile labour productivity remains more than four-fold higher than the garment sector's,⁹ reflecting the capital-intensive nature of the former relative to the labour-intensive nature of the latter.

The high proportion of MSMEs and prevalence of the low value-added cut-make-trim (CMT) garment processing method, constrain labour productivity growth. These factors also affect enterprises' profit rate, which remains low compared to the manufacturing sector average. Profit rates increase with the scale of enterprises: higher for large firms, often FDI enterprises and pioneers in technological adoption with robust labour productivity. In 2021, FDI enterprises accounted for 40 out of 44 large firms in the garment subsector (more than 5,000 workers), and 48 out of 53 large enterprises in the textile subsector (more than 1,000 workers).¹⁰ FDI enterprises which accounted for approximately 14 per cent of enterprises in 2021, play a key role in exports of Viet Nam's textile and garment products with 58–62 per cent of export turnover.¹¹ Although FDI enterprises have dominated the industry in recent years, large domestic players have grown significantly, expanded production and become strategic partners of international brands.

Viet Nam and the textile and garment global value chain

Although Viet Nam's textile and garment sector is integrated into GVCs, its participation remains characterized by weak linkages across subsectors and stages, which further dampen value addition and competitiveness. Viet Nam's participation in high value-added stages such as branding and design, marketing and distribution remains limited. Local firms' low capacity to provide services – such as raw material sourcing, design, logistics and package services for buyers – implies their interactions with global brands are often through intermediaries, such as regional traders based in Hong Kong (China), Taiwan (China) and the Republic of Korea. Vietnamese brands have grown, but yet to participate in GVCs. As such, the domestic fashion industry has not emerged as a driving force for textile and garment industry development.

Figure 1: Key information on Viet Nam's textile and garment industry



Source: ILO and VITAS, 2025. *Skills for Trade and Economic Diversification: Analysis of the textile and garment industry in Viet Nam.*

Due to significant raw material production constraints, Viet Nam remains heavily dependent on imports, which increases costs and makes it challenging to meet rules of origin requirements of free trade agreements (FTAs). The heavy dependence on imported cotton (Viet Nam has to import nearly all cotton for domestic needs and production), in a context of volatile and unpredictable prices, greatly impacts its yarn and textile subsectors. While large quantities of domestically produced yarn are exported, domestic textile firms also import yarn. The fabric weaving, dyeing and finishing subsectors remain undeveloped and yet to attract domestic and foreign investment – partly due to an inability to meet environmental standards in the context of weak support policies, such centralized wastewater treatment – leading to a shortage of domestic materials. As a result, Viet Nam's

⁸ GSO, Enterprise survey 2022.

⁹ Calculations based on data from the GSO Statistical yearbooks, 2012-22 and Labour force surveys, 2011-23.

¹⁰ GSO, Enterprise survey 2022.

¹¹ VITAS.

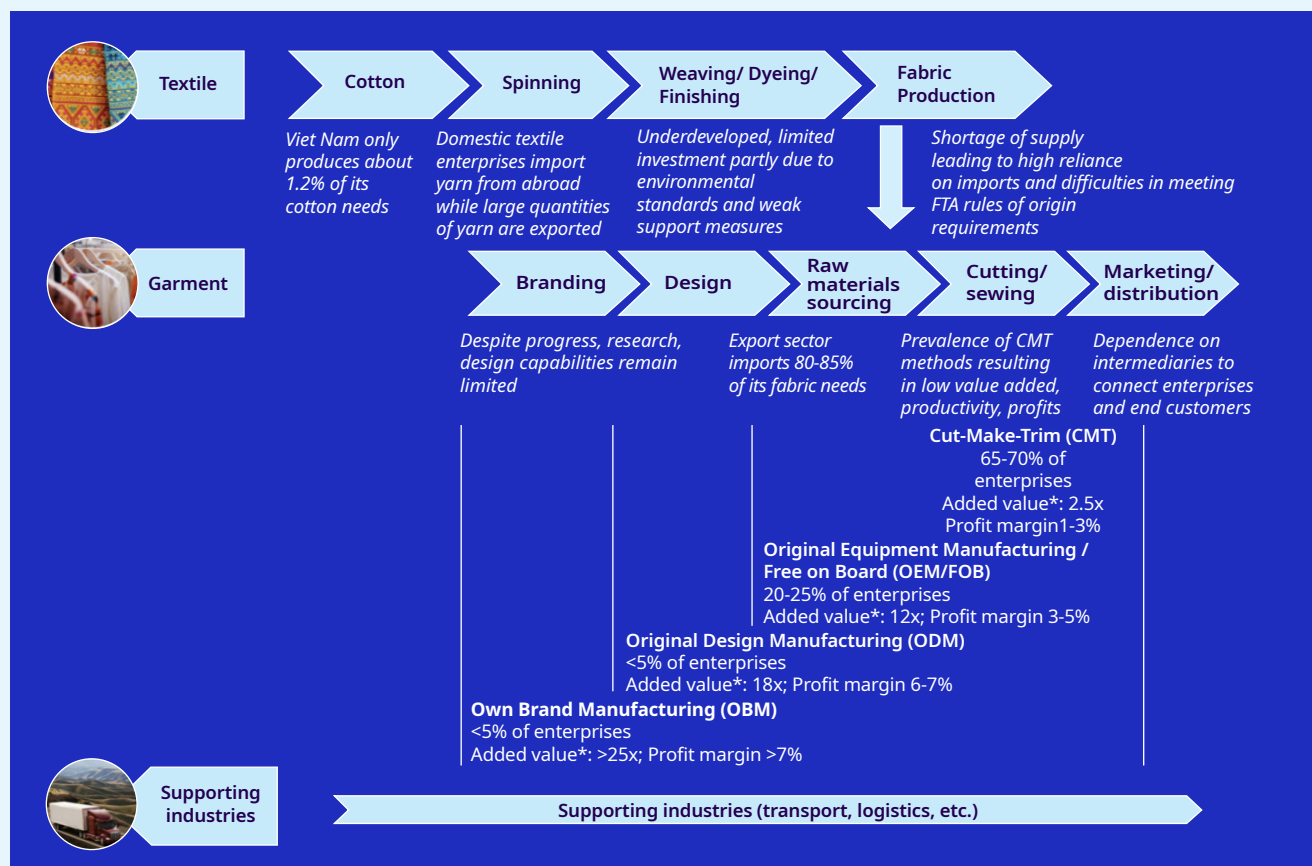
garment export production sector must import 80–85 per cent of needed fabric.¹² Recently, due to strict FTA rules of origin requirements of major trading partners, investment in Viet Nam's textile sub sector has risen and primarily originated from China, Taiwan (China) and Republic of Korea, while domestic investment remains limited. In the near future, the domestic supply of fabrics is forecast to increase with a more robust domestic value chain.

In the garment production stage, where Viet Nam's participation in GVCs is most prominent, prevailing production methods involve simple processing and low value-added activities. In 2021, 65–70 per cent of domestic enterprises applied the CMT method associated with the lowest value-added levels and profit margins, 20–25 per cent applied free-on-board (FOB) or original equipment manufacturing (OEM) production and less than 5 per cent each applied original design

manufacturing (ODM) and own brand manufacturing (OBM) (Figure 2).¹³ CMT garment manufacturers often participate in the value chain subject to coordination and supervision by international buyers. Most parents of FDI enterprises are closely tied to GVCs and operate under ODM or OEM methods, but many factories in Viet Nam apply the CMT method.

A shift from CMT to FOB would significantly boost the added value of production activities at factory level, but barriers hinder this transition: lack of dynamism and limited ability to manage the chain, difficulties in meeting importers' product quality requirements and delivery time. Enterprises also lack the financial capacity to address risks during contract execution. In addition, as most process products, enterprises struggle to develop design teams and products, as well as connect with the domestic fashion and textile industry.

Figure 2. Viet Nam's textile and garment value chain



Notes: *Added value in comparison to the raw materials stage.

Source: ILO and VITAS, 2025. *Skills for Trade and Economic Diversification: Analysis of the textile and garment industry in Viet Nam.*

¹² Ministry of Industry and Trade, 2022. *Report on the strategy for developing the textile, garment and footwear industry to 2030 and vision to 2035.*

¹³ VITAS.

Comparative advantage assessments of Viet Nam's textile and garment industry

Viet Nam is forecast to capitalize on robust textile and garment market growth in coming decades. While the labour cost advantage is diminishing, competitive energy costs and improved transportation infrastructure will backstop local textile and garment manufacturers' ability to manage and reduce production costs. In terms of human resources, the industry benefits from a demographic dividend (large and still relatively young population) which, with improved vocational education and training and skills enhancement, has the potential to boost labour productivity and competitiveness.

Viet Nam ranks among the top countries globally in garment exports, and its position relative to its industry competitors varies depending on criteria and indicators used by assessments. In one study, its competitive advantage lags behind Bangladesh, India and significantly trails China,¹⁴ while in another, Viet Nam outperforms other countries, including China, in product quality, delivery time, but performs less well with regards to tariffs, financial stability, compliance and sustainability.¹⁵ According to a third study, the most significant gap between Viet Nam and China lies in supporting industries. Additionally, factors such as low labour productivity, limited R&D spending, and notably lower FDI and outward investment by Viet Nam's textile and garment enterprises contribute to this disparity.¹⁶

Employment trends and decent work characteristics

Employment growth

The number of workers in Viet Nam's textile and garment sector has increased rapidly, from nearly 1.8 million in 2012 to approximately 3.4 million in 2023, of whom more than

three million were employed in the garment subsector and 324,000 in the textile subsector.¹⁷ Large enterprises employ a disproportionate share of the sector's workforce: in 2021, enterprises with 5,000 employees or more only accounted for 0.3 per cent of firms, but employed more than a fifth of the workforce.¹⁸ Conversely, enterprises with fewer than 50 employees accounted for 78 per cent of enterprises, but employed only 4.8 per cent of the industry's workforce.

Workforce structure

The labour force age structure in the textile and garment industry is shifting towards ageing, as enterprises face challenges recruiting younger workers. Despite a shift towards a more skilled workforce over the past decade, the industry still predominantly employs workers with low educational attainment levels, and without training certificates,¹⁹ due to its structure and prevailing CMT production methods.

The occupational structure has not changed significantly, as middle-skilled occupations continue to account for the lion's share (92–94 per cent) of the industry's employment.²⁰ However, shifts across middle-skilled occupational categories are evident. The shift from '*crafts and related trades workers*' to '*plant and machine operators and assemblers*' indicates increased automation and a structural move towards employment in larger enterprises. This has led to a decline in semi-skilled manual labour (handicraft workers in smaller workshops) and greater demand for semi-skilled workers who are able to operate and maintain machinery (sewing machine operators, on larger factory floors).

Wages and wage growth

Real wages of employees have risen rapidly, at an average annual rate of 7.2 per cent between 2013 and 2023 but remain slightly lower than the manufacturing sector average.²¹ Some enterprises report increasing challenges in recruiting workers due to fierce competition with other emerging manufacturing sectors, such as electronics.

¹⁴ Wazir Advisors, 2016. *Existing and prospective FTAs and their impact on Indian textiles exports: Final report*.

¹⁵ WTO and others, 2022. *Textiles and clothing in Asian graduating LDCs: Challenges and Options*.

¹⁶ Do Khac Dung, 2021. *The competitiveness of the textile industry in Viet Nam: An analysis to the period of a decade*.

¹⁷ GSO, Labour force surveys, 2013–23.

¹⁸ GSO, Enterprise survey 2022.

¹⁹ GSO, Labour force surveys, 2013–23.

²⁰ GSO, Labour force surveys, 2013–23.

²¹ GSO, Labour force surveys, 2013–23.

Table 1. Labour productivity and wages in the textile and garment industry

	Textile and garment	All manufacturing
Labour productivity Gross value added (GVA) ('000. US\$) per worker, 2022	4.7	8.2
Labour productivity growth AAGR 2015–22 (%)	3.6	4.4
Nominal wage ('000. VND), 2022	7,189	7,784
Real wage growth AAGR 2013–23 (%)	7.2	7.5

Source: Calculated using GVA and output data from the ADB's input-output database and GSO, Labour force surveys.

Note: AAGR (average annual growth rate).

Status in employment and informality

The quality of employment in Viet Nam's textile and garment industry has generally improved. This is evidenced by the share of employees in total employment rising 18 per cent from 2012 to 88 per cent in 2023, while the share of own-account workers decreased sharply from 23.6 to 9.6 per cent, as did the share of unpaid family workers. Strikingly, the share of informal workers halved from 52.4 to 26 per cent in a decade to 2023. While this rate is lower than the manufacturing sector average (31 per cent), nonetheless more than 880,000 of the sector's workers (more than one-in-four) are in informal employment.²²

Work arrangements and working hours

Positive developments in terms of wage employment growth and declines in informality were accompanied by a rise in temporary employment, particularly in the garment subsector. Additionally, overtime work remains an industry characteristic, despite recent progress. The prevalence of temporary contracts and overtime work is linked to the dynamics of textile and garment GVCs, which are buyer-driven. As most suppliers in Viet Nam operate under the CMT model and compete on a cost-basis with little control over input costs, they have limited room to invest in modern equipment, enhancing workers' skills, or pursuing strategies to raise productivity. Suppliers, in particular small and medium sized enterprises (SMEs) working as subcontractors, operate on tight margins and face pressures to deliver in

a timely and flexible manner while keeping wages in check. This leads to decent work deficits in terms of excessive working hours and arrangements that provide flexibility such as through temporary or casual work but result in acute insecurity for workers.

Compliance with labour laws and international standards

The same factors also heighten the risk of substandard practices and non-compliance with international standards and labour laws by factories and subcontractors. In general, export enterprises better comply than domestic enterprises as they receive more investment and are monitored by buyers. During the COVID-19 pandemic, factories further struggled to comply with labour regulations on wage payment, working hours, OSH, and employment contracts. The nature of work in textile and garment factories poses several OSH risks, with women particularly exposed. Aside from some FDI and large enterprises, many factories commonly fail to ensure safe and healthy workplaces.²³ With workers' limited OSH awareness, there is a pressing need to increase the frequency and quality of training to improve their knowledge.

Social dialogue and collective bargaining

Important steps to promote social dialogue and improve collective bargaining in the industry have been taken in recent years, but challenges remain. It was the first in Viet Nam to implement a signed collective labour agreement in 2010 between the Viet Nam Textile and Apparel Association (VITAS) and the Textile and Garment Union. Currently, 80 textile and garment enterprises participate with 120,000 workers, accounting for 3.8 per cent of the industry's workforce. However, awareness of the agreement remains limited.

Women in Viet Nam's textile and garment sector

The sector continues to provide significant employment opportunities for Vietnamese women, with one million additional jobs for women created over the past decade and the number of women workers growing from 1.4 million in 2013 to 2.5 million in 2023.²⁴ Although the share of women in the industry decreased in recent years, from 80 per cent in 2012 to 75 per cent in 2022, it remains well-above the manufacturing sector average. Women represent the larger share of employment across most occupational groups. Despite progress, only 30 per cent

²² GSO, Labour force surveys, 2012-23.

²³ ILO and VITAS, 2025. *Skills for Trade and Economic Diversification: Analysis of the textile and garment industry in Viet Nam*.

²⁴ GSO, Labour force surveys, 2013-23.

of women in 2023 occupy management positions, while the share of women professionals climbed significantly in the garment subsector over the past decade, but declined in the textile subsector. The gender wage gap declined from 17.2 per cent in 2013 to 9.3 per cent in 2023, as

salaries converged across all occupational groups.²⁵ Although women's working conditions generally improved on average, more progress can be made in terms of OSH issues, and compliance with labour laws and standards to protect women, particularly during pregnancy.²⁶

► Skills development

Factors affecting the industry and skills demand and supply

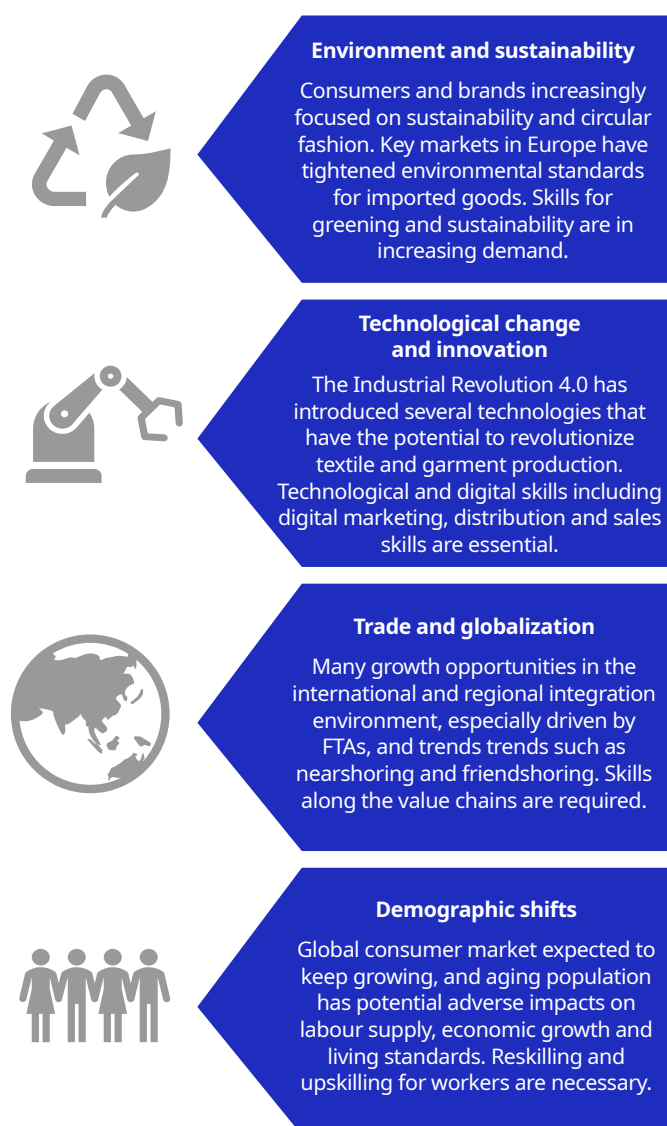
Environment and sustainability

The textile and garment industry has significant environmental impacts, with growth and sustainability highly dependent on effective resource management. Viet Nam's vulnerability to climate change and natural disasters has prompted the government to take policy actions and develop key strategies, including for this industry. However, the greening process poses challenges in terms of resources, finance, technology, and skills supply, especially for SMEs. In addition to engaging new workers who possess required skills, enterprises will need to reskill and upskill workers as they adopt green production.

Technological change and innovation

The Industrial Revolution 4.0 has introduced several technologies with potential to revolutionize textile and garment production, with important implications for jobs and skills along the supply chain. While the government has prioritized capitalizing on opportunities unlocked by Industrial Revolution 4.0, technological innovation has been relatively slow and incremental, occurring in specific stages such as cutting, product inspection, and the use of product design software among others. FDI and large domestic companies have commonly adopted new technologies²⁷ to enhance efficiency, productivity, reduce costs and labour. However, most enterprises are not yet ready for systematic investment in line with Industry 4.0 trends, with required capital particularly out of reach for SMEs. R&D investment remains low, due to slim profit margins and small-scale accumulation. Additionally, as labour costs are relatively low, many enterprises forgo investing in technological innovation.

Figure 3: Factors affecting the industry and skills demand and supply



²⁵ GSO, Labour force surveys 2013–23.

²⁶ Better Work Viet Nam, 2023. *Viet Nam Annual Report 2023*.

²⁷ 3D design, automatic cutting machines, robotic arms, standing sewing lines, hanging conveyor systems, and digitized management software.

In the short term, enterprises will commonly focus on investing in machinery, automation equipment, and localized productivity solutions to compensate for labour shortages. In the long term, as competition among exporting countries becomes increasingly fierce amid labour recruitment challenges, it will be incumbent upon enterprises to invest in management towards digitalization, automation, and improving workers' skills.

Currently, the omnichannel retail model – connecting online and offline sales channels into a seamless chain – is pursued by global fashion retail brands. In Viet Nam, e-commerce has increased, along with demand for workers with relevant skills, particularly among large enterprises. However, e-commerce transactions remain muted due to enterprises' operational shortcomings, the absence of digital technology strategies to support e-commerce deployment, and difficulties accessing major global e-commerce platforms.

Trade and global integration

To take advantage of opportunities linked to FTAs, the industry must adjust its supply chain to comply with the rules of origin, international labour standards, environmental protection and transparency principles. This requires removing technical barriers to trade and committing to special safeguard measures. Additionally, due to geopolitical factors, multinational corporations are adjusting investment strategies towards closer markets (nearshoring), friendly countries (friendshoring), and adjusting supply chains to safer regions. As such, the Vietnamese Government is actively adjusting policies to take advantage of these opportunities. Its ability to benefit from opportunities is also dependent on workforce skills along the value chain.

Demographic trends

Demographic trends globally are expected to lead to a large increase in consumer demand for garments, with some geographic shifts. Policies are needed at the national and industry levels to mitigate potential adverse impacts of population aging on labour supply, economic growth and living standards. This includes measures to enhance labour productivity, strategies to attract and retain workers (including high-skilled workers), and initiatives to reskill and upskill.



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Occupational and skills demand

Although the occupational structure at aggregate level has not experienced significant shifts, except from the *'crafts and related trades occupations'* group towards *'plant and machine operators, and assemblers'* group, ongoing industry changes are impacting occupational demand. As a result, some occupations require new skills and involve new production processes (designers, tailors, cutters, embroiderers, and sewing machine operators), while others become less relevant or disappear (primarily clerical occupations such as stock and data entry clerks) and others which constitute emerging roles, as outlined below.²⁸

For occupations facing recruitment challenges, training still remains limited in Viet Nam. For example, no training programmes are available focused on developing specific skills for material sourcing. To address skills gaps for line leaders, a key role in the industry, enterprises typically resort to selecting highly skilled and experienced technical workers and provide them with additional training focusing on leadership, management, and other essential soft skills, before assigning them as line leaders. Interviewed enterprises also reported skills shortages related to technical management, product development, and design capabilities.

²⁸ R&D director, supply chain manager, digital fashion designer, digital marketing specialist, on-line business strategy developer, design-related and IT specialists.

Table 2. Occupational and skills demand in Viet Nam's textile and garment sector

Occupational groups ¹	Scale of employment / share in sectors' employment	High demand occupations and occupations facing skills shortages/ recruitment challenges	Skills requirements
Managerial/ leadership	2023: Approximately 5,600 workers or 0.2% of workforce. Trends 2012–23: Decline in employment size and scale linked to decline in self-employment. Women's share: 30%, up from 28 per cent in 2013.	Director of R&D*[^] Manager of greening transition*[^] Production manager Product quality manager Supply chain manager*	Soft skills: coaching and mentoring skills, self-learning, planning and decision-making, presentation and consensus-building, leadership, change management, critical thinking, conflict resolution, and creativity.
Professionals	2023: Approximately 62,000 workers or 1.8% of workforce. Trends 2012–23: Number of workers doubled from approximately 31,000 in 2012. Women's share: 69% up from 66% in 2013.	Product and fashion designer Digital fashion designer*[^] R&D professional*[^] Yarn, textile, dyeing specialist[^] Fabric supply specialist* Environment specialist*[^] Electronic and mechanical engineer Automation specialist, AI*[^] High-tech specialist*[^] Online marketing specialist* Communication and branding manager/specialist*[^].	Professionals in material sourcing need a comprehensive understanding of various types of fabrics, including characteristics, applications, and suppliers. They must also be adept at negotiation and capable of establishing partnerships with raw material suppliers to secure the best prices and services. Current product development skills and design capabilities of Vietnamese designers are deemed insufficient. There is a need for skill sets along the value chain including design, product development, logistics, finance, marketing, sales, and customer services.
Technicians and associate professionals	2023: Approximately 37,000 workers or 1.1% of workforce. Trends 2012–23: Increased by 5,000 workers or 16% since 2012. Women's share: 66%, down by 1 percentage point since 2013.	Team leader/line leader[^] QA/QC (quality assurance, quality control) staff[^] Fabric supply technician* Purchasing staff/buyers Supply chain officer*[^] Sample developer, sample sewing technician[^] Green energy technician[^] Environmental and sustainability staff[^] Associate staff Compliance administrator Internal administration staff IT staff/web technician.	In addition to technical knowledge, line leaders must have leadership, management, essential and soft skills. Supply technicians, purchasing staff and supply chain officers must have skills related to negotiation, establishing partnerships, logistics.
Clerical support workers	2023: Approximately 60,000 workers or 1.8% of workforce Trends 2012–23: Number of workers more than doubled from approximately 29,000 in 2012. Women's share: 67% relatively unchanged since 2013.	Human resources/organization officer Compliance officer.	Greening-related/environmental, social, and governance (ESG) skills, safety and health skills, organization and planning of work.
Crafts and related trades workers	2023: Approximately 953,000 workers or 28% of workforce. Trends 2012–23: Number of workers increased from 830,000 in 2012 but share in employment decreased from 46%. Women's share: 81%, down 2 percentage points since 2013.	Sewing worker, packer, sewing repair worker.	Technical skills related to specific occupations, operating modern/automatic machinery and equipment, OSH, organization and planning of work and use of digital tools to control devices.
Plant and machine operators, and assemblers	2023: Largest occupational group with more than two million workers or around 61% of workforce. Trends 2012–23: Number of workers more than doubled from 791,000 and share in employment increased significantly from 44% in 2012. Women's share: 74%, down by 2.8 percentage points since 2013.	Skilled garment workers, operators of all types of machines at an enterprise [^] Cutting worker Laser fabric cutting worker*.	Workers need soft skills such as self-learning, time management and team work..

¹ Occupations are defined according to the International Standard Classification of Occupations (ISCO-08) and List of Viet Nam's occupations (Decision No. 34/2020/QĐ-TTg issued by the Prime Minister on 26 November 2020). The table excludes sales and service occupations (50,000 workers or 1.5 percent of workforce in 2023) and elementary occupations (141,000 workers or 4.2 per cent of workforce in 2023), as these groups were not highlighted as having high-demand occupations or recruitment challenges/skills shortages.

*Represents new/emerging occupations.

[^]Represents occupations facing skills shortages/recruitment difficulties.

Source: ILO and VITAS, 2025. *Skills for Trade and Economic Diversification: Analysis of the textile and garment industry in Viet Nam*.

ILO and VITAS, 2025. *Towards a sector skills strategy for Viet Nam's textile and garment industry: Priority skills needs, actions, and recommendations for education and training system*.

There is an acute need to develop skill sets that encompass technical and soft skills relevant to each occupation or group (Table 2). Skills demands in Viet Nam's textile and garment industry will continue to evolve, along with Industry 4.0 technologies and across the entire supply chain to meet 'greening' processes and value chain upgrade requirements. Improved value chain participation and taking advantage of opportunities associated with FTAs require enhancing skilled labour for the spinning, weaving, and dyeing subsectors and a workforce proficient in operating modern machinery and equipment. Additionally, strengthening the workforce in

upstream and downstream segments of the value chain is critical, with skills beyond new manufacturing processes to other domains such as design, product development, logistics, finance, marketing, sales, and customer services. Furthermore, it is essential to equip workers with requisite skills to meet increasingly stringent labour, social, and environmental requirements of international markets. In this context, upskilling and reskilling can improve the productivity of businesses, and ensure that workers' skills remain relevant, or enable reassignment from jobs that become redundant to others facing shortages.

Box 1. Production methods and labour structure at two leading textile and garment enterprises in Viet Nam

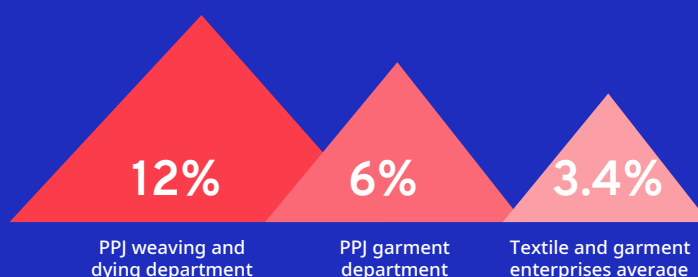
May 10 Garment Corporation

Established in 1952, May 10 is one of the oldest garment companies in Viet Nam. As of 2023, it operated 12 factories across six provinces and cities employing 7,300 workers. May 10 collaborates with prominent names in the global fashion garment industry, such as Asmara, Brandtex, Camel and Tesco. Each year, it produces nearly 30 million high-quality products, 80 per cent of which are exported to the European Union, Germany, Hong Kong (China), Japan and the United States. However, in the long term, May 10 aims to prioritize the domestic market.

May 10 has gradually invested in technological innovation and improved management, shifting from the CMT to predominantly the FOB method. Currently, it is among the top enterprises in Viet Nam in terms of modern equipment, exports and production efficiency. With this shift in production methods, May 10 has had to recruit more experts in sales, branding, raw material purchasing, IT, fashion designing, environmental management, labour safety, and market trends. The company even recruited foreign lawyers and consultants for specific roles. Consequently, its labour structure has shifted, with its number of high-skilled workers (university level or higher) increasing by 25 per cent, and its middle-skilled workers rising by 37 per cent compared to when adopting the CMT method.

PPJ Group

Established in 2007, PPJ Group has pursued a strategy of investing in modern equipment, digital transformation, green development, and production using the FOB and ODM methods. According to PPJ leaders, the company is among the top five textile and garment enterprises in Viet Nam in terms of technology, equipment, digital transformation, synchronized management, and application of Industry 4.0 technologies. PPJ currently operates 12 subsidiaries, with a total of 33 affiliated factories and branches, including garment, wash, printing, textile and dyeing factories. By the end of 2023, it employed 17,673 workers. PPJ's main products include jeans, casual wear, knitwear, formalwear, light woven garments, and workwear, all produced for brands and export markets - not for domestic consumption. To meet the demands of FOB and ODM production methods, PPJ recruited additional sales experts, merchandise specialists, denim weaving technical experts, and supply chain managers. Recently, PPJ sought to recruit 50 foreign engineers and experts due to the lack of domestic candidates who met technical and English proficiency requirements. High-skilled workers represent a greater share in employment at PPJ than the industry's average.



Source: Interviews with representatives from May 10 Garment Corporation and PPJ Group

Skills supply for Viet Nam's textile and garment industry

Workers in semi-skilled occupational categories²⁹ who constitute 'skilled workers' in Viet Nam's textile and garment industry join from multiple sources, including universities and vocational education and training (VET) institutions which encompass colleges, intermediate schools, and VET centres. Additionally, NGOs and research institutes play a significant role in providing skilled labour. A substantial portion of the skilled workforce is also trained outside formal training institutions. High-skilled occupations are typically sourced from universities and require undergraduate degrees and above. However, for various roles, companies often take the initiative to train newly recruited workers who lack training and provide supplementary training for experienced factory workers.

Viet Nam had 577 VET institutions that offered textile and garment-related programmes at three levels (college, intermediate, elementary).³⁰ These institutions comprised 113 colleges, 107 intermediate schools, 357 VET centres (Table 3). Private institutions accounted for 16 per cent of colleges delivering such programmes, 27 per cent at intermediate level, and 8 per cent among VET centres.

In 2021, the VET system's training enrollment size was around 83,000 students in textile and garment-related programmes. This included 4,000 and 15,000 students at college and intermediate levels respectively, with 64,000 students at elementary level, of whom 44,000 were enrolled at elementary level or in short-term courses of less than three months at VET centres. Additionally, 9,000 students were enrolled at university level. Some 38 universities offer textile and garment-related majors in Viet Nam, with programmes spanning numerous specializations.³¹ However, enrolment in such majors and programmes face challenges due to competition with other programmes.

Other providers, such as governmental programmes and NGOs, provide short-term vocational training courses typically less than three months in duration in



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partnership with local VET institutions. They are often targeted at rural workers, the economically disadvantaged, ethnic minorities, and persons with disabilities. Training focuses on imparting basic skills in tailoring and sewing. Additionally, initiatives like the Better Work Viet Nam Programme,³² along with various brands, frequently organize training for employees in areas such as compliance, payroll, soft skills, OSH and supply chain management skills.

Despite these efforts, and the industry seeing average annual increases of over 200,000 workers from 2015 to 2023 (excluding 2020 and 2021 due to the Covid-19 pandemic), trained workers only accounted for 40% of the total textile and garment workforce.³³ In response, enterprise-based training is common to address skills shortages as it is considered effective to meet job needs. It includes training for newly-hired workers who lack practical knowledge and specialization. Existing workers, meanwhile, engage in retraining or upskilling.

²⁹ Crafts and related trades workers, machine operators and assemblers, together accounting for 90 per cent of the industry's workforce.

³⁰ Data in 2021 from the Directorate for Vocational Education and Training (DVET).

³¹ DVET, MOET, and from consultations with relevant stakeholders.

³² The Better Work Programme is a collaborative initiative between the ILO and International Finance Corporation (IFC), a member of the World Bank Group. It aims to improve working conditions and boost the competitiveness of the global apparel and footwear industry.

³³ Calculation based on GSO, DVET data and information, and consultations with relevant stakeholders.

Table 3. Skills supply in Viet Nam's textile and garment sector (2021)

Skills supply source	Institutions	Enrolment by level (students/trainees) in 2021				Examples of academic/ training programmes*
		College	Intermediate	Elementary	Total	
Colleges	95 public, 18 private	3 935	7 365	8 310	19 610	• Fashion design • Textile technology • Sewing technology • Yarn and textile technology • Brocade weaving • Industrial sewing • Fashion sewing • Sewing equipment repair
VET institutions (at intermediate level)	78 public, 29 private		7 935	12 070	20 005	
VET and training centres	329 public, 28 private			43 744	43 744	
Universities	38 universities	University level (bachelor's and above) Enrolment data: 9 000 (at undergraduate level)				• Textile engineering • Textile and garment technology • Fashion design (visual and engineering design) • Yarn and textile technology • Mechanical engineering technology (management and maintenance of textile and sewing equipment) • Electrical and electronic engineering technology (mechatronics in textile and sewing equipment) • Industrial management (textile industry management, textile and apparel order management)
NGOs, governmental programmes, other initiatives	n/a	Short-term vocational training courses, typically less than three months in duration, in partnership with local VET institutions. Training often provided to target groups (economically disadvantaged, rural workers, ethnic communities, persons with disabilities) Enrolment data: n/a				Combination of vocational/technical and soft skills, initiatives like the Better Work Viet Nam Programme, along with various brands, frequently organize training for employees in areas such as compliance, payroll, OSH and supply chain management.

Note:* An indicative subset of programmes. A more comprehensive list is provided in the full research report.

Source: ILO and VITAS, 2025. *Skills for Trade and Economic Diversification: Analysis of the textile and garment industry in Viet Nam*.

Skills development challenges

Viet Nam's skills development system faces numerous limitations. Key ones include a fragmented management structure that results in porous coordination and weak system-level governance, challenges faced by institutions in implementing the 2014 Law on Vocational Education and Training, financial autonomy issues and resource constraints for training institutions as well as complex administrative procedures for in-company training components. Outdated training equipment and instructors with significant scope to enhance their competencies and who lack practical experience are further challenges.

Current labour and skills supply shortcomings, in terms of meeting textile and garment enterprises' requirements, primarily stem from training gaps linked to the absence of effective coordination and partnerships between the education and training system and enterprises. Barriers to effective coordination include lack of institutionalized approaches and mechanisms, challenges for institutions (non-proactive teachers, administrative procedures, insufficient funds) and businesses (time constraints and tight production schedules). Moreover, attracting students to textile and garment-related programmes is increasingly challenging across all education levels. Career guidance activities for students often lack depth and quality, while the lack of labour market information hinders training institutions from effectively planning programmes and providing career guidance to students.

Sector skills development priorities and interventions

Viet Nam's textile and garment industry is comprised of a diverse range of production and business establishments. These vary in scale, capital equipment, technology, skills, market segment selection, market access levels, production and business strategies. Consequently, the industry is evolving and will continue to develop at multiple speeds.

Maintaining and improving CMT production remains the short-term priority for most enterprises in Viet Nam, due to resource constraints and the need to limit financial and supply risks in the context of economic fluctuations and instability.³⁴ Thus, in the short run, enterprises are forecast to focus on improving product quality, productivity and process efficiency as factors that determine their ability to deliver quality outputs in a timely manner, while managing costs along with expansion of orders, exports and markets to attract investment.

In the medium-term, enterprises are forecast to make an important shift towards higher value-added production methods (FOB, ODM). In most cases, this would likely be done gradually, while maintaining CMT operations.³⁵ As such, enterprises have an opportunity to prioritize digital transformation and investment in new technologies, automation, product R&D, brand building, ensuring international standards and consumer demands are met, with sustainability and green production (using organic, recycled materials) overarching business goals.

In the long-term, based on research results, it will be incumbent upon businesses to increasingly focus on shifting towards higher value-added production methods, improving autonomy and sustainability as well as growing their domestic market share which currently remains untapped.

Table 4 presents prioritized steps for skills enhancement of key occupational groups in Viet Nam's textile and garment industry in the short, medium and long-terms based on consultations with sectoral stakeholders.

Table 4. Priority skills and interventions for skills development by key occupational groups

Managerial positions	Short-term (1-2 years) Provide training to enhance corporate governance, responsible business conduct in relation to labour rights, production management, planning, organization, and coordination skills. Update and improve skills in digital transformation, information technology, soft skills, and foreign languages. SMEs: Prioritize training for production managers, strengthen skills in planning, analysis, evaluation and human resource assessment. Large and export-oriented enterprises: Focus on strengthening skills in strategy building, digitalization, training, recruitment, operational optimization as well as risk, product quality, sales and process management.
	Medium-term (3-5 years) Provide intensive skills enhancement training for R&D directors, greening, supply chain and value chain management teams. For SMEs, focus on training in planning skills, building production and business strategies, risk and human resource management.
	Long-term (5 years and more) Provide training in modern management skills, competitive management and the application of modern technologies, including digital and AI technologies. For SMEs, focus on training in management skills, process management, and optimizing operations. Additionally, improve skills in greening and sustainable development, understanding and operating in compliance with environmental standards, sustainable production, renewable materials, safe products, and energy efficiency.
Professionals	Short-term (1-2 years) For large enterprises, export manufacturers and textile companies: provide training in yarn and textile technology, dyeing and finishing techniques, fabric analysis, and raw materials. Additionally, knowledge of modern machinery, automation, AI, wastewater treatment, green development, sustainable practices, energy saving and renewable energy use as well as compliance, labour and environmental standards should be included. For businesses utilizing FOB, ODM, or OBM production methods: prioritize training to enhance skills in product R&D, renewable materials, safe products, marketing, communication, and branding.

³⁴ Source: Consultations and in-depth interviews with enterprises and sectoral stakeholders.

³⁵ Source: Consultations and in-depth interviews with enterprises and sectoral stakeholders.

	For SMEs, especially those outside the Red River Delta and Southeast regions, focus on training in digital transformation, information technology, basic garment and fashion design skills, and supplementary knowledge of textile and garment technology and sewing techniques. Medium-term (3-5 years) Strengthen training in marketing, communication, and branding. Improve product innovation skills, including unique design, understanding fashion trends, market research, and raw material knowledge. Foster creativity, design ideas, sketching, illustrations, R&D, and proficiency in using IT design tools and software. Enhance knowledge of renewable energy and skills in operating energy-saving and water-saving systems. Develop expertise in applying greening standards, green transformation and production as well as improve internal controls, risk analysis, and assessment skills. For enterprises in the central region, provide additional training and improve skills in yarn and dyeing. Long-term (5 years and more) Provide training in planning skills, strategic thinking, and developing strategies. Enhance skills in building and restructuring value chain and supply chain models, and market analysis. Train highly specialized experts in fabrics, textile, dyeing, and textile accessories. Strengthen skills in searching and analyzing supply data, understanding supply and product market trends, appraising the quality and standards of raw materials and supplies, and grasping product market trends. Improve knowledge of wastewater treatment and reuse technology, recycling and reusing scrap and waste, energy-saving technology, renewable energy, and material conservation. Develop ecological design skills and technical expertise to effectively use green technologies and processes in working environments. Train experts in sustainable development and the circular economy.
Technicians and associate professionals	Short-term (1-2 years) Provide training to enhance observation skills and the ability to suggest improvements, as well as skills in modelling, cutting patterns, sewing patterns, using tools and software for fashion pattern designs. Improve quality assurance and quality control (QA/QC) skills, digital transformation skills, and information technology proficiency. Prioritize training to enhance the qualifications and skills of production managers, line managers, sustainability employees, and supply chain managers. Medium-term (3-5 years) Provide training to approach and apply greening standards, as well as operate and use smart and automated devices. Enhance skills in sales, customer care, promotion, after sales service, e-commerce, and online sales channel management. Provide training for technicians in fabric supply, textile and garment raw materials, green energy, environmental management, and OSH. Long-term (5 years and more) Provide skills training to learn and apply technology to production and business operations, including learning from experience and standardizing processes. Enhance skills in customer segmentation, market data search and analysis, and communication. Train order managers, sales and e-commerce specialists, supply chain managers, and compliance management specialists.
Plant and machine operators, and assemblers	Short-term (1-2 years) Skills development for this group remains critical in the short-term. Strengthen training to improve new and modern machinery and equipment operation skills, especially in SMEs. This is important for two main reasons: (i) rapid technological progress and innovation in the textile and garment industry, and (ii) the quality of training in VET institutions has not kept pace with production practices. Operators also need training in digital skills, adaptability to production changes, environmental protection standards, and energy-saving practices. Additionally, soft skills and corporate culture should be reinforced. Prioritize training a team of repairers and maintainers for machinery and equipment on production lines. At large enterprises, even in the short term, it is essential to train employees in sustainable development skills and standards, environmental protection, and green growth (particularly at export enterprises and large yarn, textile, dyeing, and finishing companies). Medium- and long-term Providing regular training to enhance the skills of the operator team is essential to keep pace with technological advancements, sustainable development requirements, and green growth. Provide training in operating and using smart devices and automation, as well as developing self-learning skills, adaptability, and operational improvements to boost labour productivity.

► Recommendations

The rise in global competition among countries within value chains, coupled with rapid automation, renders trade competitiveness reliant solely on low labour costs as unsustainable.

This further emphasizes the importance of Viet Nam's textile and garment sector accelerating its shift towards higher value-added activities through upgrading the value chain, fostering domestic sectoral linkages, and developing support industries. In tandem with these steps, Viet Nam must enhance productivity and shift its industry's growth model towards sustainable development, green practices, and technological innovation (including digitalisation). Doing so requires addressing structural challenges along the value chain, which also necessitates a workforce with the skills required to carry forward this transition. The following recommendations are based on the research findings and consultations with sectoral stakeholders as well as relevant agencies,³⁶ led by VITAS with technical support from the ILO.

Key recommendations on a systemic level

- Strengthen the domestic value chain through better linkages between the textile, garment and accessory subsectors and by promoting development of supporting industries.
- Gradually upgrade processes (from CMT to FOB) and focus on upstream and downstream value chain stages.
- Tackle the technology gap through investment and technology transfer promotion measures, and promote digital transformation.
- Enhance the direct interactions between Vietnamese textile and garment enterprises and final retailers.
- Accelerate the green transition and transfer to the circular economy.
- Develop and implement a skills strategy for the sector.

Key recommendations to improve the quality of human resources

Policy environment for the industry's skills development and promoting lifelong learning for workers

- Improve the effectiveness and implementation of policies to encourage training, especially for skills necessary for upgrading the textile and garment value chain. Create and promote a lifelong learning environment for workers.
- Implement measures to improve productivity, wages, working conditions, and career progression pathways in the sector, paramount for attracting and retaining workers.
- Enhance the image and social perception of the industry to attract learners and workers through improved communication on the industry's development potential and its role in the Vietnamese economy.
- Improve the quality of training at institutions, especially VET, both public and private, through investment in teaching equipment, capacity building of teaching staff, renovation and updating training programmes.

Training quality and relevance to industry demands

- Strengthen links between enterprises and training institutions, including sectoral participation in development of training programmes, sharing training funds, provide opportunities for internship and apprenticeships for students or trainees and exchanges for teachers as well as improve the training ordering mechanism to better link enterprises and training institutions.
- Develop training programmes to supplement skills and address skills mismatches, with engagement of enterprises. This encompasses building competency maps for each job position as a basis for developing appropriate training programmes, training in sewing techniques for product transformation, technical training in applying new technologies in production and skills needed for the green and digital transitions.

³⁶ ILO and VITAS, 2025. *Towards a sector skills strategy for Viet Nam's textile and garment industry: Priority skills needs and actions, and recommendations for education and training policy and system.*

- Enhance soft skills training before candidates' recruitment and while working at enterprises involving multiple stakeholders.
- Improve the quality of labour market information as well as labour supply and demand forecasting as a basis for career guidance, employment services, human resource training and labour recruitment plans.
- Create an information exchange mechanism between enterprises and training institutions to enable effective and timely information exchanges on skills supply and demand needs and better link labour needs of enterprises and training outputs of institutions.

Inclusive and gender-responsive training policies and practices

- Develop training programmes targeting women employees, including to enable access to managerial positions.
- Enhance training in skills for OSH and awareness of workers' rights, particularly for women.
- Develop inclusive, gender-responsive training policies across all education and training institutions to ensure equal access to high-quality training, especially for women and disadvantaged groups.

Quality assurance and certification processes

- Strengthen management training in priority areas, such as vocational assessments and a certification system for trainees and workers. Support the quality assurance of training providers, courses and evaluators.

Industry voice and participation in skills development

- Build upon the recent establishment of a working group to boost skills and sustainability in the sector as well as advance stakeholder collaboration. The establishment of the working group in December 2024, led by VITAS and including key stakeholders (enterprises, education and training providers and a sector trade union) represents a significant

milestone towards institutionalizing coordination mechanisms for stakeholder engagement and collaboration for sector skills development.

- Promote the establishment of a "Sector Skills Council" for the textile and garment industry to mobilize participation of social partners in consulting and implementing policies on vocational education and training for the industry.

Financing for sector-specific skills and training

- Explore budgetary subsidies models for training institutions based on output results or a combination of inputs and outputs, rather than relying solely on the current input-based mechanism. State funding should consider the distinct training costs associated with various specialties, avoiding a one-size-fits-all approach.
- Explore funding mechanisms to address resource constraints that prevent investment in equipment and training, particularly among smaller enterprises. This include establishing a Sectoral Skills Development Fund based on contributions from businesses, government and/or grants and donations.



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