Ministry of Labor, Doha, Qatar
TMO - Research Team

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Labor Market Imbalances in Qatar: Addressing Skilled Labor Shortages and Unskilled Labor Surpluses

Salim Al Barami
Yuri Yoshida
Ruslan Asfandiyarov

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1. Introduction

1.1 Overview of Qatar’s Labor Market Dynamics

Qatar’s economic ascent over the past two decades has been driven by large-scale infrastructure investment, energy sector expansion, and a liberal labor migration policy that enabled the rapid mobilization of foreign workers. As of 2023, non-Qataris accounted for approximately 91% of the labor force – a figure that has remained largely stable since 2018, following a high of 92.5% in 2016 (PSA 2019, NPC 2024a). This modest decline reflects early policy efforts to nationalize segments of the workforce, although the structure of labor demand remains highly dependent on foreign workers. Labor force participation data further confirms these patterns, with non-Qataris maintaining a participation rate of 91.1% in 2023, compared to 54.4% for Qataris. Notably, Qatari female participation has gradually risen – from 37.1% in 2018 to 43.5% in 2023 – indicating a slow but steady response to policy measures introduced under the Third National Development Strategy (NDS3) (NPC 2024a).

Despite this change, expatriate labor continues to dominate the workforce and remains essential to sustaining economic activity across key sectors. However, this structure has produced a segmented labor market. According to 2023 labor force distribution data, Qatari nationals – particularly women – are predominantly employed in education and health (33.5%) and public administration (37.8%). Qatari males are similarly concentrated in public administration (63.1%) and education and health (8.5%) (NPC 2024d). These trends suggest that national labor is more present in public sector and service-oriented roles.

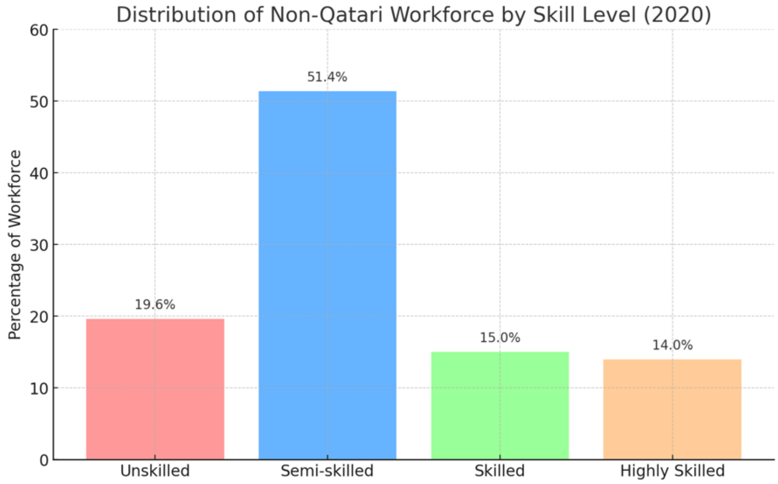
In contrast, non-Qatari males are heavily concentrated in construction (38.3%), trade (13.1%), and administrative services (9.5%), while 30.6% of non-Qatari females work in household activities (NPC 2024d). Although these figures do not directly indicate skill levels, they reflect a structural reliance on foreign labor in labor-intensive and domestic service sectors. These conditions contribute to wage polarization, uneven productivity growth, and reinforce the urgency of continued labor market reform.

1.2 Skilled Labor vs. Unskilled Labor Composition

The occupational structure of Qatar's foreign workforce is heavily weighted toward unskilled and semi-skilled roles. According to the Planning and Statistics Authority (PSA), over 62% of the economically active non-Qatari population aged 15 years and above in 2020 were classified as unskilled (20.2%) or semi-skilled (42.2%). In contrast, only 14.9% were categorized as skilled and 22.8% as highly skilled (PPC 2023). This distribution highlights the enduring imbalance between the labor demanded in Qatar's evolving economy and the actual occupational makeup of its expatriate labor force. The skewed distribution reflects historical recruitment priorities aligned with labor-intensive development phases, particularly in construction, hospitality, and personal services.

While this model enabled cost-efficient project execution, it created long-term vulnerabilities. A limited pool of skilled professionals, whether local or foreign, restricts the country's ability to advance toward a knowledge-based economy. In parallel, the oversupply of low-skilled workers has dampened labor productivity growth and placed downward pressure on wages, particularly in sectors with thin profit margins or minimal technological uptake.

Figure 1. Distribution of Non-Qatari Workforce by Skill Level (2020)



Reference Source: The majority of expatriate workers fall into unskilled or semi-skilled categories, while only a minority are highly skilled professionals (PPC 2023).

1.3 Defining the Imbalance: Shortages vs. Surpluses

The coexistence of skilled labor shortages and unskilled labor surpluses reflects a persistent structural imbalance. On the skilled side, gaps remain in key fields such as engineering, ICT, and health due to limited domestic graduate output, global talent competition, and the underutilization of existing STEM education capacity (UNESCO 2024; Alkhayareen 2023). While STEM and TVET initiatives – supported by entities such as UNESCO – aim to bridge this gap, their effectiveness is constrained by factors like the preference for public sector careers and limited practical training pathways (Alkhayareen 2023).

Meanwhile, the continued oversupply of unskilled labor stems from long-standing recruitment patterns, low labor costs, and ongoing demand in sectors such as construction and domestic services. Many workers from South and Southeast Asia remain in low-wage roles due to the lack of skill recognition and limited career mobility, even when their qualifications exceed the roles they perform (Mohamed 2021; Sayre, Benmansour, and Constant 2015).

Together, these dynamics reduce the incentive for firms to modernize or upskill their workforce, reinforcing wage disparities and limiting long-term labor market adaptability.

1.4 Significance for Economic Development

he dual imbalance – defined here as the simultaneous shortage of skilled labor and surplus of unskilled labor – presents a significant structural challenge to Qatar's economic development. This dynamic affects productivity, wage dynamics, and the pace of innovation across sectors.

Addressing this imbalance is central to the national development agenda. The Third National Development Strategy (NDS3) and Qatar's 2021 Voluntary National Review both emphasize the need to improve workforce efficiency, diversify employment pathways, and reduce dependency on low-wage labor in order to support a knowledge-based economy (PSA 2021; NPC 2024b). Unresolved skill shortages risk constraining the competitiveness of key growth sectors such as advanced manufacturing, digital services, and healthcare, while oversupply of unskilled labor may perpetuate low productivity in construction and personal services sectors (IMF. Middle East and Central Asia Dept. 2024; Kabbani 2025a).

A rebalancing of labor supply – via selective immigration policies, stronger national education and TVET systems, and greater private sector involvement – can help shift the economy toward higher value-added activities. This will require ongoing coordination across government agencies, improved labor market forecasting, and better alignment between workforce planning and human capital investment.

1.5 Report Objectives and Structure

This report examines Qatar's labor market through the lens of these twin challenges – skilled labor shortages and unskilled labor surpluses – using the latest data and policy developments as of 2024. It retains the structure of the original analysis while expanding each section with up-to-date insights. Section 2 delves into the drivers and evidence of skilled labor shortages in Qatar. Section 3 explores the causes and consequences of unskilled labor surpluses. In Section 4, we assess the economic and social impacts of these imbalances and review the policy measures implemented in response – including recent labor market reforms and initiatives under national strategies. Section 5 discusses future outlook and recommendations, considering how ongoing efforts (such as Qatar's Third National Development Strategy 2023–2030) aim to rebalance the labor market. The report maintains a formal tone and evidence-based approach to inform policymaking by the Ministry of Labor and other stakeholders. All data and factual statements have been verified against 2024 sources (e.g. IMF, World Bank, PSA) to ensure accuracy and relevancy. By addressing both sides of Qatar's labor market equation, the analysis provides a comprehensive overview of challenges and policy directions for achieving a more sustainable and skilled workforce.

2. Drivers of Skilled Labor Shortages

2.1 Sector-Specific Skilled Labor Demand Pressures

Qatar's recent economic transformation has sharply increased demand for skilled professionals across key sectors. NDS-3 identifies ICT, healthcare, education, and advanced manufacturing as critical growth areas, all of which face persistent labor shortages. The expansion of these sectors has outpaced the availability of qualified local talent, posing a serious risk to long-term growth. The following subsections examine each sector's labor challenges in detail.

2.1.1 ICT and Digital Economy Needs

Demand for ICT professionals in Qatar is surging as the country advances its digitally driven transformation. With ICT contributing 2.7% of GDP in 2022 and the market projected to grow from $5.8 billion in 2024 to $6.3 billion by 2027, the increase in demand is driven by major national initiatives under the Digital Agenda 2030 (MCIT 2024a), as well as the rapid expansion of 5G, cloud computing, AI, and smart government infrastructure (Telecom Review 2022; Embassy of Switzerland in Qatar 2024). According to the U.S. Department of Commerce, the ICT sector is already a key contributor to Qatar's economy (ITA 2024a). These developments have created mounting pressure on the local labor market to supply the technical expertise required to sustain this momentum. However, several structural barriers limit the local labor supply:

- **Skilled talent shortage:** Reliance on expatriates remains high, particularly for software, data science, and cybersecurity roles
- **Narrow domestic talent pipeline:** Few graduates emerge annually from ICT-related university programs
- **Strong global competition:** Skilled ICT workers are in high demand worldwide, making recruitment and retention challenging

These shortages have left key digital roles unfilled and driven up wages, particularly in cybersecurity, data science, and cloud engineering. The limited domestic talent pool remains a bottleneck, even as global firms operate in Qatar.

To mitigate this, Qatar has introduced talent development programs and long-term visa schemes designed to attract skilled foreign tech professionals (MCIT 2024b). In parallel, initiatives such as the Qatar Digital Academy are investing in building national digital talent (MCIT, 2024a). These measures are a step forward, but sustained investment in local STEM education and practical training remains essential. Without it, Qatar's digital transformation goals under NDS-3 risk being slowed by persistent human capital gaps (Embassy of Switzerland in Qatar 2024).

2.1.2 Healthcare and Medical Sector Gaps

Qatar's healthcare sector has grown swiftly in response to population pressures and sustained public investment. While physician density is high – 77 per 10,000 people – over 90% of nurses and nearly 70% of doctors are expatriates. This reflects the limited number of Qataris entering clinical fields and the speed at which new facilities have opened. Despite the presence of medical schools like WCM-Q and Qatar University, local graduate numbers remain low. For example, WCM-Q produced only 384 doctors over 12 years, and very few Qataris pursue careers in nursing or allied health (Oxford Business Group 2020).

This reliance on expatriates also brings long-term risks. Studies show that while foreign healthcare workers are generally satisfied, many struggle with housing, workplace integration, and career development (Bashir 2024, 2025). These adjustment issues may impact performance and retention, highlighting the fragility of a system so heavily dependent on foreign staff.

Key challenges in the sector include:

- **High reliance on expatriates:** Most nurses and technical staff are foreign nationals
- **Low domestic graduation rates:** Few Qataris graduate in clinical fields
- **Limited Qatari interest in frontline medical roles:** Nationals rarely pursue careers in nursing or primary care
- **Adjustment and retention issues for expatriates:** Challenges include housing, workplace integration, and career progression

Qatar continues to attract skilled foreign healthcare professionals through competitive salaries and modern infrastructure. However, long-term sustainability remains uncertain due to global competition and retention challenges. In response, the government has prioritized domestic capacity building under NDS-3. Medical education initiatives now emphasize structured, competency-based curricula, such as WCM-Q's six-year integrated program focused on academic excellence and service (Weill Cornell Medicine - Qatar n.d.). Continuing professional development programs, like those offered by PHCC, aim to support lifelong learning and clinical skill enhancement (PHCC n.d.). Additionally, a strategic partnership between Qatar University and the Ministry of Public Health seeks to better align healthcare education with evolving service delivery needs (The HealthcareXchange 2024). These reforms reflect a broader shift toward building a resilient, self-sustaining national workforce.

2.1.3 Education and Pedagogical Workforce Pressures

Qatar's expanding education system, shaped by demographic growth and systemic reform, continues to experience persistent labor shortages – especially in technical and bilingual instruction – despite considerable investment in infrastructure and curricula. The shift toward privatization has introduced a wider variety of school models, increasing demand for versatile, culturally competent educators capable of navigating diverse instructional environments (Amin and Cochrane 2023; Alkaabi 2025).

Key challenges in the sector include:

- **Heavy reliance on expatriate teachers:** Over 85% of teachers are foreign nationals, many on short-term contracts (Teach for Qatar n.d.)
- **High turnover and limited retention:** Frequent exits due to lack of career mobility and cultural integration barriers (Al-Kubaisi 2024)
- **Specialist shortages:** Persistent gaps in STEM, Arabic, and inclusive education roles (Amin and Cochrane 2023)
- **Underdeveloped local pipeline:** Low enrollment in teacher preparation programs and insufficient graduate output (Alkaabi 2025)

In response, Qatar has launched multi-pronged initiatives under NDS-3 and through organizations like Qatar Foundation. These include culturally relevant professional development, school-university partnerships, and alternative entry pathways for nationals via programs such as Teach For Qatar. Progress will depend not only on expanding the presence of Qatari educators but also on improving work environments and long-term career viability across diverse education settings (Usher 2024; Teach For Qatar 2024).

2.1.4 Advanced Manufacturing and Industrial Skills

Qatar's ambition to grow a high-tech, industrially diversified economy has spotlighted advanced manufacturing as a strategic priority. This includes sectors such as aerospace, petrochemicals, precision engineering, and renewable energy technologies. Government initiatives – including the Qatar National Manufacturing Strategy 2024–2030 – emphasize value-added production, innovation, and the integration of Industry 4.0 technologies (MOCI 2025b; GCO 2025). The development of free zones like Ras Bufontas and Umm Alhoul, coupled with localization policies and incentives for industrial investors (Invest Qatar n.d.), has further accelerated demand for technically skilled labor.

Despite this momentum, the talent pipeline for technical trades remains narrow. Vocational education and training (TVET) pathways are underutilized, and social perceptions often discourage young Qataris from pursuing industrial careers. Employers continue to report shortages in critical areas such as CNC machining, automation, welding, and quality assurance – positions central to scaling advanced manufacturing (PwC 2022).

Key challenges in the sector include:

- **Limited domestic uptake:** Vocational and technical trade careers are still unattractive to many nationals
- **Shortage of skilled technicians:** Persistent gaps exist in hands-on roles across industrial operations
- **TVET underdevelopment:** Training programs remain fragmented, with weak alignment to employer needs
- **Workforce localization pressure:** Companies must meet nationalization goals without compromising productivity

In response, Qatar has launched multi-pronged initiatives under NDS-3 and through organizations like Qatar Foundation. These include culturally relevant professional development, school-university partnerships, and alternative entry pathways for nationals via programs such as Teach For Qatar. Progress will depend not only on expanding the presence of Qatari educators but also on improving work environments and long-term career viability across diverse education settings (Usher 2024; Teach For Qatar 2024).

2.2 Root Causes of Skilled Labor Shortages

While Section 2.1 analyzed sector-specific demand pressures, this section explores the underlying structural factors that contribute to Qatar's persistent skilled labor shortages. These causes are systemic in nature and cut across sectors, limiting the supply of qualified labor even as economic diversification accelerates. We identify four interrelated drivers: demographic constraints, education-to-employment gaps, institutional policies, and labor market incentives.

2.2.1 Demographic and Workforce Constraints

Qatar's limited national population places inherent restrictions on the size of the domestic skilled labor pool. According to 2023 data, the labor force participation rate among Qataris was 54.4%, compared to 91.1% among non-Qataris. Within the Qatari population, male participation stood at 66.0% and female participation at 43.5% (NPC 2024a). Qatari women's participation peaks between ages 35–39 at 78.1%; however, the steady decline in labor force participation among younger women aged 20–24 – from 37.1% in 2018 to just 19.4% in 2023 – signals emerging structural barriers at the entry point to employment (NPC 2024a). These may include misalignment between educational pathways and labor market readiness, limited early-career opportunities in preferred sectors, or shifting social expectations, all of which merit closer policy attention. This downward trend raises concerns about the future availability of skilled national labor, particularly since this age group represents a crucial transition phase from education to employment. Despite nearly 48,000 Qatari women holding university degrees, many remain outside the workforce. Meanwhile, expatriates show significantly higher labor force participation – 97.3% for men and 68.4% for women – making them the dominant source of active labor in sectors such as STEM, healthcare, and advanced services (NPC 2024a).

Table 1. Labor Force & Youth Participation Rate (2018–2023)

Year	LFPR NonQatari Total	LFPR NonQatari Male	LFPR NonQatari Female	LFPR Qatari_ Total	LFPR Qatari Male	LFPR Qatari Female	YouthPR Qatari Total	YouthPR Qatari Male	YouthPR Qatari Female
2018	91.7	97.6	64.2	52.2	68.1	37.1	29.4	40.7	18.5
2019	91.5	97.5	63.6	52.4	67.9	37.6	30.4	42.1	19.1
2020	91.5	97.5	64.1	51.5	66.4	37	22.2	35.3	9.7
2021	90.8	97.2	64.6	54.2	66.7	42	23.3	36.1	9.9
2022	90.8	97.1	66.4	54.3	66.1	42.9	22	34	9.8
2023	91.1	97.3	68	54.4	66	43.5	22.4	34.1	10.4

Reference Source: Based on content from the National Planning Council's Labour Force Sample Survey 2023, specifically Tables (3) and (4) detailing national labor force participation (LFPR %) and youth participation rates (YouthPR %) in Qatar by nationality and gender from 2018 to 2023 (NPC 2024a).

2.2.2 Education and Skills Mismatches

Although Qatar has invested heavily in higher education, gaps persist between academic output and labor market needs. Technical and vocational education and training (TVET) pathways have historically been underdeveloped and undervalued, contributing to a shortage of applied competencies and job-ready graduates. Academic institutions often emphasize theoretical knowledge, while fast-growing sectors – such as ICT, logistics, and energy – demand practical skills, project-based experience, and workplace readiness (QATAR CAREER FAIR 2015; UNESCO 2024).

Employers report that many graduates lack core employability traits such as communication, teamwork, and problem-solving skills, which are not systematically integrated into curricula (Younis, Elsharnouby, and Elbanna 2023). Career guidance services are also fragmented, inconsistently delivered across schools, and lack alignment with current labor market trends (QATAR CAREER FAIR 2015). These deficiencies are particularly pronounced among female students, who often face social expectations that steer them away from technical and vocational careers (Wazen 2025).

Programs such as UNESCO's support for STEM and TVET reform and the expansion of UDST represent important advances. However, coordination between training providers and employers remains limited, and there is little integration of work-based learning opportunities such as apprenticeships or cooperative education models (Maclean and Fien 2018; UNESCO 2023). Without systemic alignment between education institutions, labor market institutions, and national policy, Qatar's talent pipeline will continue to fall short of the country's diversification goals.

2.2.3 Labor Market and Institutional Factors

Rigidities in employment practices and institutional design further compound labor shortages. While Qatarization remains a core policy objective, it has not always aligned with the actual availability of qualified national candidates. Consultations held by the Ministry of Labor in 2022 emphasized the need to recalibrate nationalization targets in line with private sector realities and to encourage skills development partnerships with employers (MoL 2025a). Meanwhile, restrictive residency policies in the past have constrained the long-term retention of skilled foreign professionals, undermining knowledge transfer and continuity in high-skill sectors. Recent reforms – such as the introduction of long-term residency permits, digital labor mobility platforms, and strategic public–private partnerships – aim to strengthen workforce planning and talent retention (Invest Qatar 2023; MoL 2024b).

Qatar's efforts have also been bolstered by sector-specific initiatives such as the MCIT-led Digital Skills Working Group, which seeks to improve the supply of national ICT talent through coordinated skill-building policies (ETHRWorld 2024). In the healthcare sector, WHO has noted that centralized workforce planning remains limited, and health professional retention strategies are weak – factors that also mirror broader labor market governance issues in Qatar (WHO 2022). These challenges are compounded in strategic growth sectors like manufacturing, where policy ambitions for increased FDI and industrial diversification will depend on more agile, skill-responsive labor market institutions (Alagos and Gulf Times 2025).

2.2.4 Public–Private Employment Incentive Gaps

Disparities in compensation, benefits, and job security between the public and private sectors have long discouraged Qataris from entering technical roles in private firms. Until 2022, private-sector employees were excluded from the national pension framework and housing allowances, leading to a strong preference for government employment. The Social Insurance Law introduced in 2022 marked a major reform, extending pension coverage and allowances to private-sector Qatari workers and laying the groundwork for greater parity (Amiri Diwan 2022; Clyde & Co 2023).

However, implementation remains gradual, and awareness among employers and workers is still limited (Baker McKenzie n.d.).

Moreover, private-sector careers continue to offer fewer guarantees around job stability and career progression, especially in highly skilled technical fields. According to the IMF (2024), efforts to address labor market duality must also tackle non-wage factors such as work conditions and mobility. New PPP and economic diversification frameworks – such as those introduced under the PPP Law and the Ministry of Commerce and Industry's non-hydrocarbon growth strategy – are expected to expand private-sector demand for skilled labor (Meouchi et al. 2025; Narayanan 2024). Nonetheless, unless incentive structures are further strengthened and regulatory clarity improved, private firms may struggle to attract and retain Qatari professionals in critical roles.

2.3 Structural Drivers of Unskilled Labor Surpluses

While Qatar's strategic development vision emphasizes the need for high-skilled labor, the domestic labor market continues to be shaped by a persistent oversupply of unskilled and semi-skilled workers. This section analyzes the structural roots of this imbalance, which is the inverse of the shortages seen in high-skilled occupations. It highlights three interconnected drivers: migrant labor recruitment patterns, sectoral employment segmentation, and limited upskilling pathways.

2.3.1 Migrant Labor Recruitment and Sponsorship Model

Qatar's historical labor market model has depended on the large-scale recruitment of low-wage foreign workers, especially in construction, hospitality, and domestic service sectors. According to 2023 labor force data, 2,055,643 non-Qatari workers were economically active, with particularly high concentrations in construction (668,908), wholesale and retail trade (252,608), and administrative and support service activities (195,852) (NPC 2024a). These labor-intensive sectors – particularly construction, retail, cleaning, and security – account for a substantial share of expatriate employment and reflect Qatar's continued reliance on low-cost manual labor.

The kafala (sponsorship) system, historically central to labor migration, enabled employers to recruit large numbers of low-wage workers with minimal regulatory friction. However, it also:

- Reinforced employer dominance over worker mobility
- Facilitated widespread labor rights violations and entrenched occupational segmentation, especially in domestic sectors

Numerous studies note that the system perpetuated unequal power dynamics and facilitated rights violations in low-wage sectors (BU Intl Human Rights 2024; El-Dekmak 2025; Reda, Fraser, and Khattab 2023).

Despite the introduction of key reforms – such as the abolition of the No Objection Certificate (NOC), the removal of exit permit requirements, and the implementation of a non-discriminatory minimum wage – implementation remains uneven. This is largely due to:

- Weak enforcement mechanisms
- Persistent irregularities among private recruitment agencies

These limitations have been documented across multiple sources (Bel-Air 2024; Sherman 2022).

In 2023, over 62% of non-Qatari workers remained in occupations classified as unskilled or elementary (PPC 2023). The private sector continues to rely on these workers due to cost advantages, limited automation, and visa-tied employment conditions. These structural constraints have made upward mobility difficult, reinforcing a cycle of low productivity and skill stagnation. The sponsorship system's legacy continues to shape labor migration flows, which remain concentrated in low-wage, low-mobility occupations misaligned with Qatar's evolving labor market strategy and long-term diversification goals.

2.3.2 Sectoral Concentration and Labor Cost Incentives

Qatar's economic structure continues to drive demand for low-skilled labor in sectors such as construction, hospitality, domestic work, and logistics. These sectors often operate under contracts that emphasize workforce volume and speed of delivery over skill intensity, reinforcing the attractiveness of inexpensive manual labor.

Firms are incentivized to maintain large low-skill workforces due to:

- Cost structures that favor headcount over productivity
- Weak enforcement of efficiency standards
- Limited urgency to adopt labor-saving technologies

This dual labor market has persisted due to both market conditions and institutional inertia. Studies by the BTI and IMF observe that firms often lack meaningful pressure to restructure toward higher-productivity models (Bertelsmann Stiftung 2024; IMF. Middle East and Central Asia Dept. 2025a). Wage compression at the lower end discourages investment in training, and recruitment patterns shaped by events such as the 2017–2021 blockade have continued to favor short-term sourcing over long-term development (Javed 2018).

As Iskander and Keshavarzian (2022) argue, the persistence of segmentation stems more from political and institutional resistance to change than from pure market logic. These dynamic limits the overall productivity and efficiency of Qatar's economy.

2.3.3 Limited Mobility and Upskilling Mechanisms

Although recent reforms have sought to enhance worker mobility and skills recognition, many low-wage workers remain unable to advance due to structural barriers such as:

- Language proficiency gaps and lack of recognized qualifications
- Employer resistance to internal promotion
- Unequal access to vocational retraining and digital resources

Platforms like Kawader and Ministry of Labor–Microsoft training partnerships have expanded access to job-matching and reskilling opportunities. However, these programs tend to disproportionately benefit nationals and the better educated (MoL 2025b).

Progress has been made in areas such as recognition of prior learning, portable certification, and mobility rights reform – backed by ILO-supported initiatives (Al Jazeera 2022; Human Rights Watch 2020). Yet migrant workers, particularly in low-skill roles, often remain excluded from these systems due to limited digital literacy or institutional support (Oswald-Egg and Renold 2021; CEDEFOP 2023).

Without more inclusive and integrated reskilling frameworks, unskilled labor is likely to remain trapped in low-wage, low-mobility roles. According to SESRI (Lari, Al Naimi, and Al Emadi 2023), Kawader participation is still heavily skewed toward Qatari nationals, leaving most migrants with limited access to higher-skilled vacancies or career progression pathways – exacerbating long-term risks of underemployment and economic inefficiency.

2.4 Labor Market Imbalance and Economic Efficiency Risks

Qatar's dual challenge – shortages in high-skilled labor and surpluses in low-skilled labor – creates structural inefficiencies that threaten long-term productivity growth, private sector competitiveness, and human capital development. This section analyzes how these imbalances manifest across key dimensions of economic performance and outlines the macroeconomic risks if left unaddressed.

2.4.1 Reduced Labor Productivity and Output per Worker

The overrepresentation of low-productivity employment in labor-intensive sectors—such as construction, cleaning, and retail—continues to constrain output per worker in Qatar's non-energy economy. While GDP per capita remains high (QAR 253,000 in 2023) due to capital-intensive sectors like hydrocarbons (QAR 304.5 billion), productivity in non-energy segments remains below potential. Labor-heavy sectors such as construction (QAR 89.0 billion), wholesale and retail trade (QAR 56.2 billion), and accommodation and food service activities (QAR 6.9 billion) absorb large workforces but contribute disproportionately less to national output (NPC 2024c).

According to IMF assessments, Qatar's non-hydrocarbon productivity growth remains modest despite capital investment. The private sector's labor productivity gains have been slow, with skill mismatches, overreliance on expatriate workers, and limited integration of nationals into productive private-sector roles cited as persistent bottlenecks (Bi and Miyajima 2024; IMF. Middle East and Central Asia Dept. 2025b). The IMF's 2025 Article IV Staff Report further highlights that labor market segmentation has slowed economic diversification by limiting the efficient reallocation of skills and weakening incentives for private investment in high-productivity sectors (IMF. Middle East and Central Asia Dept. 2025a).

Key structural constraints include (Fargues, Shah, and Brouwer 2019; Almeer, Bhatti, and Babar 2025):

- **High employment segmentation:** Over 60% of expatriates are concentrated in elementary or low-skill occupations
- **Limited residency pathways:** Restrictions on long-term stay options reduce Qatar's competitiveness for attracting high-skilled labor
- **Short-term private sector incentives:** Employers favor transactional labor over long-term workforce development

These constraints also reduce incentives for private investment in high-productivity sectors. Aboueldahab (2021) further argues that reliance on transactional labor relationships undermines both social and economic efficiency, especially when paired with insufficient social protections for low-income workers.

Unless workforce planning, upskilling, and immigration strategies are better aligned, labor market segmentation will continue to suppress Qatar's productivity potential and delay structural transformation toward a knowledge-based economy.

2.4.2 Private Sector Bottlenecks and Enterprise Competitiveness

Private firms – particularly in manufacturing, healthcare, and ICT – struggle to scale due to persistent talent shortages in critical occupations. As PwC (2022) notes, Qatar's manufacturing sector faces acute gaps in technical and engineering roles, compounded by limited domestic training pipelines and high turnover of expatriate staff. In healthcare, similar constraints persist, with the national strategy emphasizing the recruitment of specialized professionals to sustain a growing, high-quality health system (KUNA 2025).

In ICT and cybersecurity, rapid sectoral expansion has outpaced local skill development, creating reliance on foreign expertise in areas such as cloud infrastructure, digital forensics, and AI systems integration (ITA 2024b). While targeted skilling partnerships are emerging, the talent gap remains a binding constraint on private-sector scaling.

Meanwhile, surpluses of low-skilled labor inflate HR, accommodation, and onboarding costs without proportional productivity returns, particularly in labor-intensive industries. ESCWA (2025) highlights that limited alignment between education output and employer needs in Qatar further exacerbates these imbalances, especially in high-skill sectors.

This mismatch between workforce composition and sectoral demand undermines the business environment, weakens return on capital investment, and limits the competitiveness of Qatari firms in value-added and export-oriented segments. Unless addressed through a coordinated skills agenda, these structural bottlenecks may continue to inhibit private-sector contribution to economic diversification.

Table 2. Sectoral Labor Constraints in Qatar's Private Sector

Sector	Main Constraint	Consequences
Manufacturing	Shortage of technical and engineering staff	High turnover, limited domestic training
Healthcare	Insufficient supply of specialized healthcare professionals	Reliance on international recruitment to maintain quality
ICT / Cybersecurity	Shortage of local digital/AI/cybersecurity talent	Dependence on expatriate specialists and delayed scaling

Reference Source: Based on content from PwC (2022), ESCWA (2025), ITA (2024b), and KUNA (2025), summarizing key workforce-related bottlenecks across strategic sectors in Qatar, including manufacturing, healthcare, ICT, and labor-intensive industries.

2.4.3 Fiscal and Social Sustainability Concerns

The persistent reliance on a large low-wage expatriate labor force generates fiscal pressures in the form of infrastructure, housing, and social service costs, particularly given the scale of Qatar's foreign worker population, which exceeds 85% of the total population (ILO 2022). According to BNP Paribas (2020), this model – though cost-effective in the short term – has long-term budgetary consequences, particularly when economic shocks reduce fiscal flexibility.

At the same time, the underemployment of educated nationals – particularly women and youth – represents a critical missed opportunity to capitalize on domestic human capital. Studies show that structural preferences in the labor market, combined with employer biases and rigid labor segmentation, continue to limit inclusive participation (Khan 2022). If these imbalances persist, they may constrain long-term fiscal space, widen inequality, and erode institutional capacity to deliver socially cohesive and inclusive development outcomes.

2.4.4 Distorted Incentives in Labor Allocation

Qatar's labor market remains shaped by legacy structures that prioritize low-wage labor cost efficiency over productivity-oriented employment models. Despite a wave of reforms, labor allocation remains driven more by visa-linked employment schemes and administrative quotas than by long-term human capital planning or productivity alignment. Research indicates that wage compression and standardized remuneration packages have reduced incentives for firms to develop internal career ladders or differentiated talent strategies (QFC 2025).

Moreover, coordination between national employment policies and private sector demand remains weak. The fragmentation of Qatarization efforts across sectors – especially in strategic industries such as energy, ICT, and health – has limited the impact of policy on actual hiring decisions (The Peninsula 2024). As a result, highly educated nationals are often underutilized, while many skilled expatriates are placed in roles below their capacity due to rigid credentialing or visa limitations (Almeer, Bhatti, and Babar 2025).

Without recalibrated labor incentives, including flexible employment schemes, skill-based migration pathways, and improved intersectoral planning, Qatar risks entrenching a low-skill equilibrium that undermines its innovation ambitions and long-term competitiveness.

3. Causes and Consequences of Unskilled Labor Surplus

This section analyzes the structural and cyclical drivers behind the accumulation of low-skilled labor surpluses in Qatar and their demographic, economic, and policy consequences. It highlights how project-driven labor demand, recruitment patterns, and institutional structures contributed to persistent inefficiencies and vulnerabilities in the labor market.

3.1 Infrastructure Boom and Labor Influx

As noted in Section 2, Qatar's rapid development – particularly the construction surge linked to the 2022 World Cup – generated labor demand far beyond domestic supply. The government reportedly spent over $300 billion on stadiums, transport, and urban infrastructure (Bibolov et al. 2024), drawing millions of migrant workers into roles across construction, hospitality, and services. These inflows spurred GDP and population growth, though largely concentrated in capital-intensive sectors with limited domestic spillovers (Bibolov et al. 2024). The European

Parliamentary Research Service (2021) similarly warns that such mega-events often produce short-term economic gains but leave structural labor mismatches when demand fades (Immenkamp 2021).

Key features of the labor market during this period included:

- **Extremely low Qatari participation:** In 2023, only 124,665 of the 2.18 million economically active population were Qatari nationals-just 5.7% (NPC 2024a).
- **Heavy reliance on expatriate labor:** Over 94% of the workforce consisted of non-nationals.
- **Sectoral demand concentration:** Most migrants were employed in labor-intensive roles across construction, services, and hospitality.
- **Demographic impact:** Qatar's labor force grew from 280,000 in 1997 to over 2.1 million by 2017, almost entirely due to foreign workers (Kabbani 2025b).

This led to a sharp rise in low-skilled migrant workers, mostly from South Asia, drawn by job opportunities linked to Qatar's infrastructure boom. While this strategy met urgent labor needs, it also created structural reliance on foreign workers – who by 2022 made up an estimated 95% of the labor force (Garver-Affeldt 2022). The same source warns that such models expose migrants to job insecurity, weak protections, and limited post-project planning, leaving many stranded once major projects conclude.

3.2 Readily Available Low-Cost Labor

Qatar's labor policies historically made it easy and inexpensive to import and retain low-skilled foreign workers, contributing to persistent labor surpluses. The core driver was the kafala (sponsorship) system, which tied workers' residency to their employers. Despite recent reforms, the legacy of this system continues to shape labor market outcomes.

Key factors contributing to labor oversupply:

- **Kafala system control:** Allowed employers to restrict job mobility, withhold wages, and confiscate passports (Walk Free n.d.; ILO 2019).
- **Delayed wage reform:** No minimum wage existed until 2021. The introduced minimum (QAR 1,000/month + allowances) benefited ~400,000 workers but remains modest (ILO 2020).
- **Low-cost labor advantage:** Migrants from South Asia accepted low wages due to limited alternatives and remittance opportunities, reducing employer incentives to raise productivity.
- **Weak enforcement of reforms:** Despite abolishing the exit permit and No Objection Certificate, many employers still block transfers using informal means (Campbell 2022; ILO 2020).

These conditions have produced a segmented labor market. Many surplus workers remain "locked in" – unable to shift to sectors with demand or repatriate – while others idle between projects, exacerbating inefficiencies and limiting mobility.

3.3 Demographic and Social Impacts of Surplus Labor

Qatar's decades-long reliance on low-skill migrant labor has reshaped its demographic profile in profound ways. The population now reflects major imbalances in nationality, gender, and age structure – largely attributable to the country's import-driven labor model.

Key demographic consequences include:

- **Expatriate dominance:** As of the 2020 census, non-Qataris made up approximately 94% of the economically active population aged 15 and above (PPC 2023). Overall, foreign nationals represent over 88-91% of Qatar's total population (Kabbani 2025a).
- **Extreme gender imbalance:** Due to the predominance of male labor migrants, Qatar's population is now about 75% male (PPC 2023). The ratio of males to females was approximately 3.3:1 in 2023.
- **Age structure distortion:** Most expatriate workers are aged between 25 and 45, leading to a "bulge" in the middle of the population pyramid (PPC 2023).

Associated societal and infrastructure pressures:

- **Infrastructure gap**: Qatar's population expanded from 369,000 in 1986 to nearly 3 million in 2020 (PPC 2023), driven mostly by labor inflows. Infrastructure investment – such as Labour City with a capacity of up to 100,000 workers – lagged behind, resulting in overcrowded industrial zones.
- **Housing disparity**: Migrant accommodations are often concentrated in designated zones, where overcrowding and low standards remain prevalent.
- **Limited integration pathways**: The temporary and segmented nature of labor migration restricts social integration, with minimal access to long-term residence or citizenship (Kabbani 2025b).

An economic side-effect of the labor oversupply has been persistent wage stagnation in lower-skilled occupations. Anecdotal evidence and historical employer practices suggest that wages for many manual and service jobs remained flat for years, particularly prior to the 2021 minimum wage reform. Although the minimum wage improved conditions for the lowest-paid workers, it also formalized a low wage benchmark. With limited bargaining power and high worker turnover, employers had little incentive to raise wages or invest in labor productivity.

Finally, the surplus of expatriate labor has led to a significant outflow of earnings as remittances. According to Kovessy (2014), expatriates in Qatar remit over $15 billion annually, with the vast majority flowing to countries such as India, Bangladesh, Nepal, and the Philippines. This trend underscores the structural reliance on foreign labor and the scale of capital leaving the domestic economy (Ratha et al. 2024). The scale of remittance outflows also underscores the structural reliance on foreign labor and its external economic consequences.

3.4 Post-World Cup Adjustment

Qatar's post-World Cup period marked a pivotal transition in labor market configuration. While the wind-down of infrastructure megaprojects led to a temporary drop in construction employment – reflected in a –0.2% sectoral contraction in Q4 2023 compared to Q4 2022 (NPC 2024c) – the broader challenge lay in realigning labor supply with evolving economic priorities.

Emerging sectors such as tourism and LNG provided new employment avenues, and by late 2024, overall employment had surpassed pre-World Cup levels (IMF 2024; IMF. Middle East and Central Asia Dept. 2025a). However, not all displaced workers were well-positioned to benefit. IMF sources emphasize that while Qatar's economy continues to diversify and digitize, a significant portion of the existing workforce remains mismatched to emerging demand, especially in areas requiring digital fluency and soft skills (Kularatne, Miyajima, and Muir 2024). These shifts have accentuated structural segmentation between high- and low-skilled labor groups, a challenge that persists despite labor market reforms.

In parallel, Ratha et al. (2024) highlights that remittance outflows – still exceeding $15 billion annually – underscore the extent to which labor-generated income is not recirculated domestically. This trend reflects Qatar’s long-standing reliance on expatriate labor and reveals persistent challenges in transitioning toward a more integrated and skill-diverse economy.

These patterns suggest that the real test of Qatar’s labor reforms lies not only in policy shifts but in their capacity to enable inclusive participation in a changing economy. Section 4 explores the strategic frameworks being introduced to address this challenge.

4. Policy Responses and Strategic Initiatives

This section outlines Qatar's recent and ongoing policy initiatives aimed at addressing imbalances in the labor market. These efforts span regulatory reforms, strategic investments in education and skills, labor market information systems, and institutional mechanisms to manage workforce flows more effectively. The goal is to transition from reactive labor recruitment to a more planned, skill-aligned, and nationally inclusive employment model.

4.1 Strategic Policy Shift Towards Human Capital Development

Qatar’s labor market policies are undergoing a strategic shift away from dependence on low-cost expatriate labor toward investments in local human capital and high-skilled migration. Central to this transition is Qatar National Vision 2030 (QNV2030) and the Third National Development Strategy (NDS3), both of which emphasize productivity, sustainability, and workforce diversification.

Key policy directions under NDS3 include:

- **Reducing sectoral overreliance on low-skill labor** by targeting value-added industries and modern services (PSA 2024; IMF. Middle East and Central Asia Dept. 2025a).
- **Expanding female labor participation**, especially among young Qataris, through policy support, workplace flexibility, and career development initiatives aimed at reducing inactivity rates (PPC 2023; PSA 2024).
- **Streamlining migration and visa policies** to better align labor inflows with sectoral demand, while gradually phasing out dependence on low-productivity occupations (PSA 2024).

- **Enhancing the quality and reach of technical and vocational education and training (TVET)** systems to meet evolving market needs, particularly by increasing private sector collaboration and modernizing curricula (PSA 2024; ESCWA 2025).

Kularatne, Miyajima, and Muir (2024) notes that structural reforms since 2021, including the introduction of a minimum wage and easing job mobility, have begun to mitigate some labor market rigidities. However, it emphasizes that "further reforms are needed to address skills mismatches and boost productivity." Notably, Qatar's economic diversification beyond hydrocarbons remains gradual, with persistent gaps in innovation, entrepreneurship, and workforce alignment.

4.2 Institutional Mechanisms for Labor Market Planning

To improve labor market governance, Qatar has expanded its institutional toolkit:

- The **National Employment Platform (Kwader)** was launched to centralize recruitment and match Qatari job seekers with private sector opportunities. As of mid-2023, it had facilitated employment for tens of thousands of nationals and is now linked to targeted nationalization initiatives for recent graduates and high-skill vacancies (The Peninsula 2023; Lari, Al Naimi, and Al Emadi 2023; MoL n.d.).
- The **Labor Market Information System (LMIS)** developed by the Ministry of Labor provides near real-time visibility into occupational trends, employment flows, and wage patterns. A recent collaboration with international partners has strengthened LMIS capacity to flag emerging skill gaps and sector-specific vulnerabilities (MoL 2024; Yuan 2025; ILO Project Office for the State of Qatar 2025).
- The **Workers' Support and Insurance Fund**, operational since 2020, has grown in scope – offering compensation in cases of wage theft, contractual violations, or company bankruptcy. As of early 2025, the fund had provided support to over 130,000 workers, and new digital processes have improved claim resolution transparency and speed (The Peninsula 2025b; WSIF n.d.).
- The **Ouqul platform**, introduced by the Ministry of Labor, provides a dedicated gateway for university graduates to access public and private sector job opportunities in alignment with nationalization strategies. It complements Kwader by targeting a younger, degree-holding demographic (MoL 2025c).

ILO Project Office for the State of Qatar 2025 and Yuan (2025) both emphasize that while Qatar's institutional reforms have made measurable progress, sustained success depends on translating insights into actionable labor policy – particularly through closer alignment between LMIS outputs and workforce development programs.

4.3 Sector-Specific Interventions and Private Sector Engagement

Policy responses also include targeted interventions in high-priority sectors:

- **Manufacturing:** Qatar's manufacturing strategy under the Ministry of Commerce and Industry (MOCI) 2024–2030 framework targets a 30% increase in the industrial sector's GDP contribution and a 40% localization of industrial supply chains. Critically, the strategy aims to raise the proportion of high-skilled workers in the manufacturing workforce to 26.5% by 2030 – addressing long-standing skill shortages and ensuring sectoral productivity. This labor-market-centered approach is supported by robust policy tools such as industrial clusters, targeted FDI incentives, and SME development initiatives. Circular economy practices are also gaining traction, with 35% of factories expected to adopt circular production models by 2030. Strategic partnerships with global firms like Siemens and Toyota are being leveraged to accelerate Industry 4.0 certification and smart manufacturing upgrades. Concurrently, the National Skilling Program plans to train 50,000 individuals in high-tech domains such as AI, IoT, and blockchain by 2025, aligning with industrial transformation goals (MOCI 2025a,b; fDi Intelligence 2025; Al-Kinani 2025; The Peninsula 2025a;PwC 2024;ILO 2024; MCIT 2022).

- **Healthcare**: Qatar's National Health Strategy 2024–2030 explicitly targets the development of a resilient, high-quality healthcare workforce, with a focus on increasing domestic training capacity and streamlining international recruitment channels to address critical shortages in skilled professionals. Medical education intake is being scaled up by 30%, alongside bilateral recognition agreements with countries such as the Philippines and India to facilitate credential portability. Digital health infrastructure is also expanding rapidly: the "Qatar Health Exchange (QHEx)" platform supports real-time clinical data sharing and telemedicine, while public-private partnerships are playing a vital role in constructing new medical facilities and integrating advanced diagnostic systems. According to the 2024 Digital Inclusion Index, 83% of Qatar's population accessed digital healthcare services, with initiatives such as the Better Connections program targeting digital literacy among low-income healthcare support staff (GCO 2024; ITA 2024c; PwC 2025; ESCWA 2025; MCIT 2024c).
- **ICT and Fintech:** Qatar's Digital Agenda 2030 outlines a strategic vision based on six transformative pillars – hyper-connectivity, supercomputing, intelligent automation, cloud-first infrastructure, digital inclusion, and cybersecurity – with the goal of contributing $11 billion to non-oil GDP by 2030. Implementation is supported through flagship initiatives such as QDG NextGen and the Qatar Digital Skills Framework, and investments from Microsoft, Google, and Oracle in cloud and AI infrastructure. In fintech, the Qatar Central Bank launched its National Fintech Strategy in 2023, which includes regulatory sandboxes, a digital currency pilot, and blockchain payment systems such as Partior. Complementing this, the Qatar Fintech Hub and a $100 million venture capital fund aim to scale early-stage firms and local digital talent. A recent digital readiness assessment by MCIT and Deloitte highlights a projected shortage of 30,000 ICT specialists by 2030, particularly in cloud services, cybersecurity, and AI – placing urgency on digital talent development as a core labor market priority. To mitigate this, programs such as Qatar Digital Academy and sector-aligned university curricula are being scaled up (MCIT n.d., 2024c, d; QNA 2023; KPMG 2023; ITA 2024d; QFC 2021; QCB 2023; Invest Qatar 2024).

New Growth Areas:

- **Green Technology**: Post–World Cup innovations such as carbon-neutral cooling systems are being scaled for export to MENA countries, while Qatar's broader green technology agenda – articulated in the National Development Strategy 2024–2030 – prioritizes low-carbon industries, environmental upskilling, and sustainable job creation. The Ministry of Environment and Climate Change (MoECC) is promoting public-private collaboration to build green skills, develop sustainable industrial clusters, and strengthen in-country value (ICV) initiatives to reduce dependency on expatriate low-skill labor. These efforts aim to align economic diversification with long-term labor market balance by stimulating employment in emerging high-skill, environmentally driven sectors (MOFA 2025; NPC 2024b; MECC n.d.; Qatar Tribune 2025a, b).

- **Education Export**: Qatar collaborates with the World Bank on debt-for-education swap programs and delivers EdTech solutions, including digital certification systems, to low-income countries. Domestically, Qatar is also investing in international accreditation for its educational institutions to improve graduate mobility and global recognition, while expanding vocational training and sector-aligned education programs. These initiatives aim to better align human capital development with labor market needs, especially in strategic sectors experiencing skill shortages (ITA 2024d; Export.gov 2019; QAHE n.d.; The Shura Council. n.d.).

However, these sectoral strategies must contend with entrenched segmentation and legacy staffing patterns. The European Parliamentary Research Service (2021) warns that without addressing firm-level incentives, reforms may stall. For instance, 70% of public tenders reportedly factor headcount into evaluations, which may deter firms from investing in automation (Immenkamp 2021). Additionally, the 2024 Digital Inclusion Index reports that 40% of elderly and low-skilled workers experience difficulty with AI tools. The MCIT's "Better Connections" initiative aims to bridge this gap by training 1.5 million migrant workers in digital literacy (MCIT 2024c).

Finally, regulatory complexity is an ongoing challenge. The enforcement of Qatar's 2016 Data Protection Law and the 2024 AI Guidelines has increased compliance burdens. Nearly 30% of SMEs report difficulties in adapting to new digital compliance standards (ITA 2024d).

5. Conclusion

Qatar's labor market is marked by a pronounced duality: persistent shortages in skilled labor and a chronic oversupply of unskilled labor. This imbalance reflects both historical development choices – particularly Qatar's reliance on low-wage expatriate workers during its infrastructure-driven growth phase – and systemic constraints in local talent development and labor policy coordination. As Qatar transitions toward a knowledge-based, innovation-driven economy under the Third National Development Strategy (NDS3), these labor market distortions pose risks to productivity, equity, and economic diversification.

On one side of the spectrum, Qatar faces significant constraints in high-skill occupations such as ICT, healthcare, advanced manufacturing, and education. These gaps are driven by demographic limitations, underutilized TVET systems, and institutional incentives that continue to favor public sector employment. At the same time, over 60% of the expatriate workforce remains in low-skilled or elementary roles, often trapped by legacy systems like kafala, wage compression, and limited pathways for upskilling or mobility.

Efforts to address these issues are underway and have gained considerable momentum. Labor reforms between 2018 and 2024 – including the minimum wage law, removal of exit and mobility barriers, expansion of LMIS capacity, and the rollout of national employment platforms such as Kwader and Ouqul – have laid foundational groundwork. In parallel, sectoral strategies and public–private partnerships have been launched to train national workers, upgrade labor standards, and stimulate investment in human capital.

However, as this report has shown, policy progress has not yet fully translated into structural transformation. Skilled labor shortages continue to constrain innovation and growth in high-value sectors, while the surplus of low-skill labor – particularly among migrant workers – leads to inefficiencies, wage stagnation, and social integration challenges. Bridging these gaps will require deeper institutional reforms, more inclusive workforce planning, and stronger alignment between labor market demand, migration policies, and educational investments.

Ultimately, achieving labor market balance is not just a human capital or regulatory issue – it is central to Qatar's future competitiveness, fiscal sustainability, and social cohesion. The next phase of reforms must move beyond compliance and pilot initiatives toward long-term systems change that rewards skills, encourages innovation, and ensures that both Qatari nationals and migrant workers can contribute meaningfully to Qatar's development.

Key Takeaways:

1. **Persistent Labor Market Asymmetry:** Qatar faces a structural mismatch – critical shortages in high-skilled sectors coexist with entrenched surpluses of low-skilled labor, particularly among migrant workers in labor-intensive industries.
2. **Insufficient Alignment Between Training and Demand:** Despite ongoing investments in education and reform, technical and vocational outputs remain poorly matched to private sector needs, especially in STEM and digital fields.
3. **Limited Impact of Reforms Without Institutional Shifts:** While labor reforms have improved rights and systems (e.g., mobility, minimum wage, LMIS), their transformative potential is constrained by segmented employment structures and employer incentives tied to headcount rather than productivity.
4. **Targeted Sectoral Strategies Show Promise:** National strategies in manufacturing, healthcare, digital economy, and green technology have begun aligning human capital development with diversification goals – but require sustained execution and better integration with migration and employment policy.
5. **Systemic Integration Is Key:** Resolving labor imbalances demands a holistic approach – coordinating workforce planning, migration regulation, education reform, and ESG-aligned industrial policy under a unified long-term strategy.

Taken together, these insights point to the urgent need for coordinated, evidence-based policymaking that not only addresses current mismatches but also prepares Qatar's labor market for future economic transformation.

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market planning in line with Qatar National Vision 2030 and the Third National Development Strategy (NDS3).

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