Qatarization and Skill Mismatch: Examining the Unintended Consequences of Workforce Nationalization in Qatar

Salim Al Barami

Yuri Yoshida

Ruslan Asfandiyarov

Contents

1. Introduction 2
1.1 Workforce Nationalization and Qatarization 2
1.2 Qatarization: Policy Evolution and Strategic Role 3
1.3 Defining Skill Mismatch 5
1.3.1 International Definitions and Implications 5
1.3.2 International Definitions and Implications 6
1.3.3 Qatar-Specific Evidence and Policy Gaps 6
1.4 Purpose and Scope of the Report 7
2. A Typology of Skill Mismatch under Qatarization 7
2.1 Overstaffing and Underutilization in Government and Quota-Filled Roles 7
2.2 Forced Promotions and Role Misalignment 8
2.3 Sector-Specific Cases of Misplacement 9
2.3.1 Energy Sector 9
2.3.2 Banking and Financial Sector 9
2.3.3 Education Sector 9
2.4 Anecdotal Evidence from Qatari Employees and Employers 10
2.5 A Synthesis of Mismatch Patterns 11
3. The Systemic Impact of Skill Mismatch 12
3.1 Productivity Loss and Operational Inefficiency 12
3.2 Decline in Employee Morale and Job Satisfaction 13
3.3 High Turnover and Retention Challenges 13
3.4 Institutional and Economic Consequences 14
3.5 A Framework of Key Consequences 15

4. Policy Recommendations and Strategic Reforms 15
4.1 Demand-Driven Education and Training 15
4.1.1 Curricular Alignment with Industry Needs 15
4.1.2 Apprenticeships and On-the-Job Training 17
4.2 Career Counseling and Early Guidance 18
4.2.1 Sector-Embedded Career Services 18
4.2.2 Psychometric and Competency Assessments 18
4.3 Flexible Quota Mechanisms and Implementation 19
4.3.1 Strategic Quota Differentiation 19
4.3.2 Instruments for Phased and Agile Implementation 20
4.4 Public–Private Coordination and Institutional Oversight 20
4.4.1 Inter-Ministerial Talent Councils 20
4.4.2 Employer Incentives for Upskilling Nationals 21
4.5 Competency-Based Placement and Lifelong Learning 21
4.5.1 Certification-Aligned Recruitment 21
4.5.2 Continuous Professional Development 22
4.6 Data-Driven Workforce Planning and the Role of LMIS 23
5. Conclusion 23
Key Takeaways: 25
6. References 25

1. Introduction

1.1 Workforce Nationalization and Qatarization

Workforce nationalization refers to government-led strategies aimed at increasing the employment of local citizens in both public and private sectors, thereby reducing reliance on expatriate labor. These policies have been deployed under various banners across the Gulf—such as Emiratization (UAE), Saudization (Saudi Arabia), and Omanization (Oman)—each influenced by local labor dynamics, political imperatives, and demographic pressures.

Saudi Arabia began nationalization efforts as early as the 1980s, with the launch of the Nitaqat system in 2011 marking a notable institutional milestone (Basahal, Forde, and MacKenzie 2023). This system categorized firms based on their compliance with national hiring targets. However, the policy's impact was constrained by the persistent appeal of public-sector jobs and the absence of effective labor market matching mechanisms, factors explored in the context of Saudi Arabia's quota-based system (Durand-Lasserve 2022). Recent analysis of the restaurant sector highlights that while Saudization policies may show short-term gains in employment numbers, challenges related to workforce training, employee retention, and sectoral readiness continue to

impede long-term sustainability (Sobaih 2023). More recently, Saudi Arabia has expanded Saudization mandates to additional professions, requiring compliance across engineering, finance, and IT sectors, with full enforcement expected by 2025 (Middle East Briefing 2025). Omanization, similarly, was formalized in the 1980s and has emphasized localizing roles in sectors like construction, retail, and banking. While the program has improved national visibility in the labor force, long-standing structural issues such as segmentation between expatriate-dominated and nationalized sectors, wage disparities, and inconsistent enforcement continue to limit its broader success. These dynamics have been observed in both historical and contemporary evaluations of Oman's labor market reforms (Das and Gokhale 2010; Yoel 2018).

Across the Gulf Cooperation Council (GCC), nationalization has been pursued not only as an employment strategy but also as a social contract mechanism—aimed at rebalancing citizenship entitlements within rentier-state economies. However, its execution has produced uneven results. Research highlights that structural impediments—including deep-rooted segmentation between public and private labor markets, overdependence on expatriate workers, and underinvestment in skills development—remain central obstacles (ILO 2023; Winckler 2024). Additionally, new scholarship points to the growing emergence of 'labor market outsiders' among nationals themselves—those excluded from both stable public-sector roles and competitive private opportunities—resulting in frustration and disillusionment with nationalization goals (Elbanna and Fatima 2022; Hertog 2025). This is compounded by limited enforcement capacity and weak alignment between education systems and market demands. Elbanna's research on workforce nationalization across GCC countries identifies persistent institutional inertia, insufficient stakeholder coordination, and a lack of long-term strategic planning as key inhibitors to policy success (Elbanna 2022).

1.2 Qatarization: Policy Evolution and Strategic Role

Qatarization is the national employment strategy adopted by the State of Qatar to ensure meaningful participation of Qatari nationals in the workforce, particularly in strategic sectors such as energy, finance, and government. While the term 'Qatarization' became widely used following Emiri directives in 1997—which required private companies to employ Qataris in at least 20 percent of their jobs—the origins of the policy can be traced back to 1962, when Law No. 3 was enacted to grant priority employment rights to Qataris across various sectors (State of Qatar 1962). By the time of independence in 1971, all administrative posts in the public sector were already held by Qatari nationals (Stasz et al. 2007a; Wiedmann, Salama, and Thierstein 2012). The 1997 directive marked a turning point in extending this policy emphasis to the private sector, setting employment targets such as a quota-based system that set national employment targets of 50 percent in the energy sector and 20 percent in private and semi-governmental entities by 2005 (Stasz et al. 2007a; Doha News Team 2013).

Despite initial state backing, Qatarization targets have remained largely unmet. Studies have attributed this outcome to structural segmentation between national and expatriate labor forces, institutional weaknesses, and insufficient alignment between higher education and the needs of key industries (Stasz et al. 2007b; Hertog 2014). Labor force data from 2004 shows that only 1.5 percent of Qataris were employed in what was then defined as the private sector (limited to banking, insurance, and hospitality). Labor force data from 2004 shows that only 1.5 percent of Qataris worked in what was then defined as the private sector. When including mixed-sector entities, this rises to about 8.7 percent. Meanwhile, 68 percent were employed in government and

23 percent in fully state-owned corporations. These figures reflect the dominance of public employment and the limited impact of quotas in encouraging private-sector participation (QSA 2005). These shortfalls were compounded by limited institutional coordination and lack of preparedness among private employers to absorb national talent (Constant, Sayre, and Abdelkader 2015).

The initial emphasis of Qatarization was sectoral—focused heavily on the oil and gas industry, which continues to be one of the most active areas for national employment targets. Companies such as Qatar Petroleum (now QatarEnergy) were mandated to achieve specific Qatarization quotas, often around 50% in technical and administrative roles (QatarEnergy n.d.). However, implementation challenges soon emerged, including the limited pool of technically skilled nationals, high wage expectations, and preferences for public-sector roles (Gonzalez et al. 2008). In response, new policy instruments were introduced, such as scholarship programs, leadership development tracks, and partnerships between universities and state-owned enterprises to cultivate future talent pipelines (QatarEnergy LNG n.d.; Gasal n.d.).

Over the past decade, the scope of Qatarization has broadened to include additional sectors such as finance, aviation, telecommunications, and healthcare. In alignment with the objectives set forth in the Qatar National Vision 2030 and further articulated in the National Development Strategies (NDS1–NDS3), stakeholders including the Ministry of Labor, the Qatar Financial Centre, and national universities have implemented internship schemes, wage subsidy programs, and employment platforms aimed at supporting the integration of nationals into priority economic sectors (GSDP 2008,2011; PSA 2018,2024). A 2024 initiative by the Ministry of Labor focused on expanding job-matching services and engaging private employers to advance localization in both established and emerging industries. However, the same initiative reported that employers continue to express concerns over skills mismatches, absenteeism, and high turnover, pointing to an ongoing disconnect between educational outcomes and job market needs (MoL 2024b). While new platforms and training interventions have emerged, such as the updated national employment portal announced in 2024 (MoL 2024c), broader reforms in vocational education, sector-specific planning, and employer incentives are still required to ensure meaningful outcomes.

Table 1. Timeline of Major Qatarization Policy Milestones (1962–Present)

Year/Period	Policy or Event	Sector Focus	Remarks
1962	Law No. 3 prioritizing Qatari employment	General employment	Earliest legal foundation for Qatarization
1970	All administrative public-sector roles held by Qataris	Public sector	Post-independence state-building focus
1997	Emiri directive mandates 20% Qatari employment in private companies	Private sector	Beginning of structured Qatarization in private sector

Year/Period	Policy or Event	Sector Focus	Remarks
2005 (target)	Quota targets: 50% in energy, 20% in semi-governmental/private sectors	Energy, semi-governmental, private	Formalized quota-based system
2011–2020	Diversification into finance, healthcare, telecoms; launch of training schemes	Multiple economic sectors	Expansion beyond oil & gas
2021–2024	NDS1–3: National platforms, wage subsidies, internships	Broad economic sectors (QNV2030 aligned)	Institutional integration of Qatarization strategy
2024–Present	MoL expands job-matching services; renewed push in private sector	Private and emerging sectors	Policy recalibration in response to persistent skill mismatch

Note: *This timeline synthesizes policy developments from official documents including Qatar National Vision 2030 and the National Development Strategies (NDS1–NDS3), as well as government announcements by the Ministry of Labor (MoL 2024b, 2024c).*

Despite these barriers, Qatarization remains a core pillar of the human development strategy. In contrast to earlier localization programs in neighboring countries, Qatar's model is closely tied to its long-term economic transformation agenda. Workforce nationalization is framed not only as a labor market necessity but also as a contributor to innovation, productivity, and sustainable development. However, balancing the imperatives of localization with the demands of a competitive and technologically evolving economy continues to require more agile and evidence-based policy instruments.

1.3 Defining Skill Mismatch

1.3.1 International Definitions and Implications

Skill mismatch refers to the discrepancy between the skills that workers possess and those that are required by employers for specific jobs. According to the International Labour Organization (ILO), it encompasses overqualification (where workers have more skills than needed), underqualification (where they lack necessary competencies), and skill obsolescence (where existing skills become outdated due to technological or structural changes in the economy) (ILO 2017, 2020).

Internationally, skill mismatch is widely acknowledged as a critical inefficiency in labor markets, especially in economies undergoing structural changes. Cedefop emphasizes that mismatches hamper economic growth, prolong unemployment, and suppress productivity and wages

(Cedefop 2015). The ILO concurs, stressing that underutilization of workers' skills diminishes labor potential and underscores the need for responsive education systems and better labor market data to anticipate demand trends (ILO 2024).

The European Commission similarly warns that unresolved mismatches weaken labor reallocation processes and intensify long-term unemployment unless paired with robust educational reforms (Vandeplas and Thum-Thysen 2019). Shin and Bills (2021) further highlight that skill mismatches not only disrupt individual employment outcomes but also compromise overall economic performance through inefficient use of human capital and reduced innovation (Shin and Bills 2021).

1.3.2 International Definitions and Implications

In the GCC, where nationalization strategies often emphasize numerical targets over skills alignment, skills mismatches are frequently exacerbated by fragmented labor systems. A report by PwC notes that across the region, employers face persistent challenges in recruiting nationals with the right technical and soft skills for evolving roles in sectors such as finance, healthcare, and advanced manufacturing (PwC 2024). Ashmawi (2015) discusses how poorly aligned education-to-employment pipelines in Arab countries, including Qatar, have led to significant underemployment among qualified nationals, with many being hired into roles unrelated to their training or aspirations (Ashmawi 2015). These challenges are compounded by prestige-driven preferences for public-sector roles and limited private-sector training opportunities (Elbanna et al. 2023).

1.3.3 Qatar-Specific Evidence and Policy Gaps

Within the context of Qatarization, skill mismatch frequently arises when nationals are appointed to roles for which they lack the requisite training or interest—often to fulfill localization quotas rather than support long-term workforce strategy. Research conducted on Qatar's vocational and higher education systems highlights persistent challenges in aligning graduate output with labor market needs, particularly in STEM and manufacturing sectors (Said and Alhares 2021; PwC 2022). A recent empirical study by Elsharnouby et al. (2023) confirms that local job seekers in Qatar encounter multiple obstacles to securing suitable employment, including a lack of practical experience and insufficient opportunities for applied learning (Elsharnouby et al. 2023). These challenges are reflected in persistent disconnects between academic curricula and the competencies prioritized by private-sector employers, particularly in Qatar's key sectors.

Although the National Development Strategy 2024–2030 (NDS3) emphasizes enhancing employability and education-to-employment alignment, it does not explicitly reference "skill mismatch" as a concept. Instead, it prioritizes broader goals such as improving labor market efficiency and strengthening workforce competencies through reforms like vocational training and private-sector collaboration (PSA 2024). Nonetheless, challenges remain in translating these goals into measurable progress due to persistent gaps in institutional coordination and stakeholder alignment.

Thus, defining and diagnosing skill mismatch is critical to assessing the unintended consequences of Qatarization. It helps frame the analysis of why policy success in increasing national employment may not equate to gains in productivity, morale, or economic diversification.

1.4 Purpose and Scope of the Report

This report critically examines whether Qatarization, as currently implemented, results in unintentional skill mismatches that undermine both individual and organizational outcomes. The analysis addresses the following questions:

1. Intent vs. Outcome: What are the stated goals of Qatarization, and how do actual labor market dynamics align—or misalign—with these objectives?
2. Mechanisms: How do quota systems and government policies influence hiring decisions, and do they consider skills and competencies adequately?
3. Impacts: What evidence exists of productivity loss, job dissatisfaction, and turnover due to mismatched placements?
4. Solutions: What policy reforms, training strategies, or institutional changes might better align Qatarization efforts with real labor market needs?

The findings are based on academic literature, official statistics, employer feedback, and policy evaluations. While the primary focus is on Qatar, regional comparisons with other GCC states are used to contextualize nationalization practices.

Ultimately, this report seeks to determine whether Qatarization, while well-intentioned, may inadvertently hinder labor market efficiency by placing nationals into roles unsuited to their skills or aspirations. If so, these challenges demand policy refinement to enhance both effectiveness and equity in workforce integration.

2. A Typology of Skill Mismatch under Qatarization

2.1 Overstaffing and Underutilization in Government and Quota-Filled Roles

One of the most persistent and visible manifestations of skill mismatch under Qatarization arises in the form of overstaffing and role underutilization—particularly within government institutions and quota-driven private entities. Qatarization mandates often lead to staffing decisions that emphasize numerical compliance over actual institutional need, resulting in the inefficient deployment of national talent (Bunglawala 2011).

The IMF (2024) identifies bloated staffing structures in Qatar's public institutions, where excessive national hiring has led to narrowly defined, largely administrative roles that hinder operational efficiency (IMF. Middle East and Central Asia Dept. 2024). Fatima and Elbanna (2022) add that such overstaffing diminishes role clarity and fosters a mismatch between task requirements and employee competencies (Elbanna and Fatima 2022).

Elsharnouby et al. (2023) reinforce this institutional critique by highlighting that local job seekers and employees often view Qatarization placements as lacking in substance, primarily due to the limited opportunities for professional development and meaningful engagement in their roles. Perceptions of limited development opportunities and inadequate role engagement contribute to diminished morale and dissatisfaction among local employees, reinforcing feelings of disengagement and questioning the substantive value of Qatarization placements (Elsharnouby

et al. 2023). Collectively, these findings point to structural inefficiencies that suppress both individual growth and institutional productivity.

Such misalignment not only curbs institutional productivity but also erodes morale, as employees find themselves in roles that neither challenge their skills nor contribute meaningfully to organizational objectives.

2.2 Forced Promotions and Role Misalignment

In parallel with overstaffing, accelerated or premature promotions represent another dimension of mismatch that continues to undermine the goals of Qatarization. In institutions eager to meet localization targets, some nationals are advanced to supervisory or managerial roles before acquiring the necessary technical experience or leadership training. While these promotions satisfy compliance indicators, they often result in role misalignment, diminished performance, and lower self-confidence among the promoted individuals (Elbanna and Fatima 2022; Fatima and Elbanna 2025).

This phenomenon is not new. A RAND study highlighted as early as 2008 that the rapid advancement of Qatari nationals—especially within government ministries and public sector companies—frequently resulted in job-role mismatches, with many promotions deemed nominal, aimed more at meeting quota expectations than building institutional leadership capacity (Gonzalez et al. 2008).

These patterns persist. A recent editorial in *The Peninsula* observed that while Qatarization remains a commendable objective, progress has often been hampered by "volatile preparation," particularly when nationals are promoted without systematic leadership development frameworks (The Peninsula 2024).

These challenges are especially evident in critical sectors such as finance, energy, and infrastructure, where effective middle management hinges not only on technical expertise but also on competencies like decision-making, conflict resolution, and team leadership. Yet, many institutions lack succession planning and structured development pipelines, resulting in bottlenecks and leadership vacuums.

According to Bunglawala (2011), performance appraisal systems in many public organizations remain underdeveloped, leaving newly promoted nationals without constructive feedback mechanisms or clear growth trajectories. This not only weakens leadership performance but also disrupts team cohesion and operational efficiency. When expatriates perceive that promotions are based more on politics than merit, it can also foster resentment and disengagement—especially as they often serve as mentors or technical anchors within their teams. In the long term, such dynamics may hinder institutional learning and compromise organizational cohesion.

To address these systemic issues, some leading organizations in Qatar have established targeted leadership development initiatives for nationals. These programs incorporate structured mentoring, rotational assignments, and real-time leadership challenges to ensure that promotions are earned and supported—offering a more sustainable alternative to quota-driven advancement.

2.3 Sector-Specific Cases of Misplacement

2.3.1 Energy Sector

Qatar's energy sector has been a central focus of nationalization efforts since the 2000s (QatarEnergy n.d.). However, the implementation of Qatarization policies has often prioritized meeting quota targets over aligning with the actual operational demands of the sector. Bunglawala (2011) notes that many national hires are assigned to administrative or support functions, with key technical and engineering roles still dominated by expatriates. According to QatarEnergy's 2023 Annual Review, the corporation emphasizes competency-based development and tailored training programs to prepare nationals for key positions. Initiatives such as the Ta'sees onboarding program and scholarship schemes aim to support long-term career pathways in the energy industry (QatarEnergy 2024).

However, qualitative studies highlight that many Qatari employees perceive their roles as symbolic, with limited opportunities for growth. Al-Yafei (2022) documents how structural challenges—including unclear performance metrics, insufficient mentoring, and limited access to meaningful technical experience—hinder skill development and discourage motivation. Nationals in such roles often report feeling sidelined from substantive tasks and perceive constrained pathways for advancement. This suggests that despite achieving quota targets, sustainable localization and knowledge transfer remain elusive.

2.3.2 Banking and Financial Sector

The mismatch is particularly pronounced in the finance and banking sector, where many national hires are assigned to customer-facing or clerical roles that do not align with their qualifications or aspirations. Said and Alhares 2021 (2021) report that graduates often lack essential workplace competencies such as critical thinking, interpersonal communication, and digital literacy—skills increasingly required for strategic positions in the industry.

Additional evidence from a case study of Alpha Bank in Qatar highlights persistent institutional barriers to talent progression, including the absence of clear development pathways and weak retention mechanisms (Dalloul, Amanulla, and Elbanna 2021).

Moreover, Younis, Elsharnouby, and Elbanna (2023) identify the emergence of the "phantom employment" phenomenon—where Qataris are officially listed as employees to meet nationalization quotas but are not actively engaged in meaningful work. Participants in their study questioned the effectiveness of this practice, citing its negative impact on engagement and future employability. While the banking sector has technically fulfilled quota obligations, this has sometimes come at the expense of genuine professional development and organizational integration.

2.3.3 Education Sector

In the higher education sector, Qatarization faces unique challenges, particularly in aligning national employment with institutional needs and academic standards. While the state has heavily invested in international partnerships and scholarship programs, systemic barriers remain. Momani (2025) notes that many Qatari graduates, despite holding international degrees, struggle to transition into local academic roles due to mismatches in pedagogical approaches,

research expectations, and language of instruction. These barriers often lead to underemployment or assignment to administrative rather than instructional roles.

Similarly, Mrad, Fayad, and Zeineh (2025) observe that while higher education contributes positively to Qatar's macroeconomic development, the link between advanced education and employability is tenuous when academic programs are not aligned with the labor market's skill demands. In practice, this disconnect limits the potential impact of Qatarization in academic institutions. Khodr (2011) further argues that Education City's international branch campuses—while elevating Qatar's academic reputation—often operate independently of local workforce planning. As a result, national graduates face challenges integrating into these institutions, which may prioritize global standards over national employment goals.

Addressing these challenges requires not only increased localization targets but also institutional reforms that promote mentorship, alignment between curricula and national needs, and sustainable pathways for academic careers.

2.4 Anecdotal Evidence from Qatari Employees and Employers

Qualitative studies and institutional reports highlight enduring mismatches between workplace realities and the expectations of Qatari job seekers. Research indicates that many nationals perceive Qatarization primarily as a means to replace expatriates and secure leadership positions, particularly in the stable and well-paid public sector. This perception contributes to a "waithood phenomenon," where graduates may remain unemployed while waiting for an ideal government role, and can foster a sense of entitlement to guaranteed employment. This is reinforced by societal views that equate certain jobs with social status, leading to a reluctance to accept technical, vocational, or private-sector roles that are perceived as having lower status or less favorable working conditions (Al-Yafei 2022).

These elevated expectations can contribute to high employee turnover, as trained nationals often leave for more competitive salaries and benefits offered by other entities in the energy and military sectors. Consequently, some managers hold stereotypical views that Qatari employees may be less committed, which can complicate recruitment and retention efforts (Al-Yafei 2022). This skills misalignment is also documented in the finance and banking sector, where TVET programs are often not synchronized with real-world job demands, limiting graduates' readiness for roles that require a blend of technical and strong social skills (Said and Alhares 2021).

Across sectors, employers report a consistent gap in essential non-technical competencies. In engineering, industry stakeholders emphasize a growing future need for graduates to possess skills in innovation, leadership, management, and adaptability (Abdulwahed 2016). Similarly, employers in finance prioritize leadership, communication, and cultural awareness, with one manager in an insurance company stating a preference for hiring candidates with strong interpersonal skills, noting, "we will train them technically" (Said and Alhares 2021). This aligns with the broader perception among some private-sector employers that national employees can have inadequate skills compared to their expatriate counterparts (Al-Yafei 2022).

This divergence between national ambition and institutional needs signals a deeper cultural and systemic disconnect. The research collectively points to the need for a closer, more strategic alignment between Qatar's educational institutions and its labor market. Recommendations include reforming curricula to integrate practical experience and non-technical skills, fostering stronger partnerships between industry and TVET providers, and implementing policies that

better manage employee retention to meet the goals of a knowledge-based economy (Abdulwahed 2016; Said and Alhares 2021; Al-Yafei 2022).

2.5 A Synthesis of Mismatch Patterns

The preceding subsections demonstrate that skill mismatches under Qatarization are not isolated anomalies but interconnected and systemic in nature. Several recurring patterns emerge:

- **Symbolic compliance through overstaffing**: In many quota-driven roles, particularly within the public sector and state-linked industries, national employment targets are met by inflating staffing numbers without ensuring meaningful job responsibilities or productivity. This has led to instances of 'phantom employment' and inflated wage bills with minimal returns (Elsharnouby et al. 2023; IMF. Middle East and Central Asia Dept. 2024; Gonzalez et al. 2008).
- **Premature promotions and vertical distortions**: As documented in managerial and HR studies, nationals are often advanced too quickly to fulfill localization metrics, even when lacking sufficient experience or supervisory capacity. This not only undermines workplace hierarchies but also erodes the perceived meritocracy within institutions (Younis, Elsharnouby, and Elbanna 2023; The Peninsula 2024).
- **Sectoral and occupational mismatch**: Mismatches persist in priority sectors such as banking, industry, and education, where national graduates frequently lack technical, soft, or job-ready skills. Employers report significant gaps in preparedness, especially in vocational and STEM-linked roles. These issues are compounded by rigid labor regulations and limited collaboration between education providers and industry stakeholders (Said and Alhares 2021; Momani 2023; QatarEnergy 2024).
- **Motivational and aspirational dissonance**: Among some job seekers, the misalignment stems from expectations of rapid advancement, preference for high-status roles, or aversion to perceived low-prestige jobs in the private sector. In turn, these attitudes are shaped by earlier socialization and policy signals that equate national employment with entitlement rather than development (Bunglawala 2011; Alyafei 2022).

Taken together, these patterns reveal that the challenges of Qatarization are not merely technical or sector-specific—they reflect broader structural tensions between policy ambitions and labor market realities. Addressing these issues will require a shift from compliance-based localization to capability-based integration, with reforms that promote effective skilling, institutional coordination, and sustained national workforce engagement.

Table.2 Grouped Typology of Skill Mismatches under Qatarization

Mismatch Category	Examples	Root Causes	Impact	Key References
Institutional / Quota-Driven	Phantom employment,	Compliance over competence, quota pressures	Reduced productivity, morale erosion	Elsharnouby et al. 2023; IMF. Middle East and Central Asia Dept. 2024;

Mismatch Category	Examples	Root Causes	Impact	Key References
	overstaffing, forced promotions			Younis, Elsharnouby, and Elbanna 2023
Sectoral Misalignment	Misplacement in finance (admin roles), TVET gaps in industry/energy, STEM shortages	Training–labor disconnect, weak private-education linkage	Underutilization of national talent	Said and Alhares 2021; Momani 2025; QatarEnergy 2024
Individual-Level Dissonance	Unrealistic career expectations, status-based job avoidance, motivational disengagement	Social norms, policy-induced expectations	Low retention, mismatched aspirations	Brookings 2011; Al-Yafei 2022; Mrad, Fayad, and Zeineh 2025; Khodr 2011

Note: *This table synthesizes observed mismatch patterns from Sections 2.1–2.4 of the report, classifying them into broader structural categories. It highlights the interplay between policy design, labor market dynamics, and social expectations that shape Qatar's nationalization outcomes.*

3. The Systemic Impact of Skill Mismatch

3.1 Productivity Loss and Operational Inefficiency

Skill mismatch under Qatarization policies has been linked to reductions in both individual and organizational productivity. A study by McGowan and Andrews (2015a) demonstrates that mismatches in OECD countries, particularly overqualification, correlate with lower labor productivity due to poor task allocation and inefficient utilization of human capital.

In the context of Qatar, Fatima and Elbanna (2025) demonstrate how workforce nationalization driven primarily by quota compliance results in poor alignment between employee capabilities and job demands, particularly in high-value sectors such as energy and finance. This leads to reduced operational efficiency and limited organizational performance. Al-Yafei (2022) finds similar inefficiencies in Qatar's state-owned enterprises, noting that poor alignment between technical job requirements and employee skillsets contributes to delays, rework, and operational underperformance. Sarrakh, Renukappa, and Suresh (2022), in a broader Gulf context, highlights how productivity challenges are intensified by structural misalignments between labor policy, human capital development, and the rapidly evolving demands of energy transition.

Although Mohannadi et al. (2024) discusses broader sustainability dimensions in Qatar, including employment, direct evidence on the productivity effects of mismatch remains limited. Comparative studies, such as Cortes, Kasoolu, and Pan (2020) on Saudi Arabia, underscore how labor misallocations under nationalization can severely limit productivity gains and long-term

economic transformation. These findings reinforce the need for targeted workforce planning and dynamic skill development frameworks to realize the full benefits of nationalization policies.

3.2 Decline in Employee Morale and Job Satisfaction

The implementation of Qatarization, particularly where mismatches exist between policy intent and workplace reality, has been linked to a decline in morale and job satisfaction for both national and expatriate employees. For Qataris, a sense of demotivation can arise from perceived inequities in the labor market. Al-Mansoori (2018) notes that when nationals believe expatriates are given preferential treatment, it can lead to significant frustration. This is compounded by the findings in the Brookings Doha Center paper, which argues that a Qatarization strategy focused on "quantity" over "quality" and providing guaranteed job security can inadvertently reduce the motivation for nationals to pursue continuous skill development (Al-Subaiey 2010). Furthermore, preconceived negative notions about the private sector can demotivate job seekers before they even enter the workforce, creating a cycle of disengagement when available roles do not meet their high expectations (Elsharnouby et al. 2023).

The decline in expatriate morale, as detailed by Irfan et al. (2024), is not an isolated consequence but creates a negative feedback loop that can further impact the job satisfaction of Qatari employees and the overall effectiveness of nationalization efforts. An environment where experienced expatriates feel their positions are precarious is unlikely to foster the genuine mentorship and knowledge transfer essential for developing the national workforce. This can create a dysfunctional organizational climate characterized by mistrust and diminished collaboration, rather than the cohesive, high-performance culture needed to achieve strategic goals.

For Qatari employees, particularly those early in their careers, this environment can be counterproductive; they may be entering workplaces where their international colleagues are disengaged or guarded, hindering their own professional integration and skill acquisition. Thus, the sources collectively suggest a significant unintended consequence: a policy designed to empower the national workforce can inadvertently create workplace dynamics that undermine morale across both expatriate and Qatari employees, ultimately constraining job satisfaction, impeding skill development, and diluting the very productivity gains the Qatarization strategy aims to secure.

3.3 High Turnover and Retention Challenges

Skill mismatch, particularly the disconnect between employee qualifications and job demands, is a significant driver of high turnover intention. When employees perceive themselves as over-qualified for their roles, they often experience lower job satisfaction and develop a stronger intention to leave in search of better opportunities that align with their skills and career aspirations (Chen, Tang, and Su 2021). This phenomenon creates a persistent retention challenge for organizations, leading to increased recruitment costs and institutional instability.

In the Gulf region, these challenges are amplified by specific nationalization dynamics. As Elbanna and Fatima (2022) note, private sector firms often experience high turnover among national employees who leave for more attractive remuneration packages and perceived career prospects in the public sector. This cycle makes private companies reluctant to invest heavily in training nationals, fearing they will not see a return on their investment. For expatriate employees, the threat of replacement under Qatarization policies creates a climate of job insecurity that

directly harms their organizational commitment. Studies show that this uncertainty negatively affects expatriates' desire to remain with their employers, as they live with the constant fear of being replaced (Irfan et al. 2024).

The impact of these dynamics is evident across sectors. In the UAE, for example, Zeffane and Shaker Bani Melhem (2017) found that public sector employees report higher job satisfaction and lower turnover intention compared to their private sector counterparts, partly due to greater job security and benefits. Conversely, a lack of trust and perceived organizational support in the private sector directly fuels higher turnover. This dynamic is also reflected in the organizational-level study by Al-Mansoori (2018), which found a positive correlation between Qatarization strategy implementation and employee motivation but also noted that retention remains a key challenge.

Collectively, these findings indicate that skill mismatch and misaligned expectations do not merely affect individual performance but are systemic drivers of turnover. For both national and expatriate workforces, the failure to provide clear career paths, equitable rewards, and a stable, supportive work environment results in a cycle of disengagement and departure, undermining long-term human capital development.

3.4 Institutional and Economic Consequences

At a systemic level, skill mismatch contributes to the inefficient allocation of human capital, which can have significant negative consequences for productivity and long-term economic resilience. OECD research by McGowan and Andrews (2015b, 2017) demonstrates a direct link between the prevalence of skill mismatch—particularly over-skilling—and lower aggregate labor productivity. Their analysis suggests that a high share of over-skilled workers can "clog up" the labor market, trapping valuable talent in less productive firms and making it more difficult for innovative, high-productivity firms to attract the human capital needed to expand. This inefficient allocation of skills acts as a drag on the economy's overall productive capacity.

Furthermore, nationalization policies centered on quotas can inadvertently create institutional and economic distortions. Elbanna and Fatima (2022) argue that when nationalization is pursued primarily through a "numbers game" of meeting hiring targets, it can lead to "ceremonial adoption" by private firms. Companies may hire nationals simply to comply with regulations and maintain legitimacy, rather than focusing on building a competitive local workforce. This can result in the hiring of underqualified individuals or the creation of roles that do not contribute meaningfully to productivity, thereby undermining the economic objectives of nationalization.

These international and regional findings are particularly salient for Qatar, where the structure of the labor market presents unique challenges. The significant wage and benefit differentials between the public and private sectors create a strong gravitational pull for national talent towards government employment. These dynamic risks creating the very labor misallocation that McGowan and Andrews (2017) identify as detrimental to productivity, as the private sector—the intended engine for diversification under Qatar National Vision 2030—may struggle to attract and retain the nation's most skilled human capital. Simultaneously, the pressures of quota fulfillment could lead to the "ceremonial adoption" described by Elbanna and Fatima (2022), where the statistical goals of Qatarization are met without achieving the more crucial objective of enhancing national productivity. Therefore, without an integrated policy approach that addresses

both skill development and the structural incentives of the labor market, Qatar risks seeing the economic dividends of its nationalization strategy fall short of their potential.

3.5 A Framework of Key Consequences

The consequences of skill mismatch under Qatarization policies are multi-faceted, extending from individual employee experiences to broader organizational and national economic outcomes. The evidence reviewed in the preceding sections indicates that when nationalization is pursued without a concurrent, strategic focus on skill alignment and human capital integration, it can generate significant unintended inefficiencies. Key consequences include direct productivity losses, a decline in workforce morale, heightened turnover challenges, and systemic distortions that may hinder long-term economic diversification.

Productivity is impaired as the misallocation of talent—whether through over-qualification or skill gaps—leads to suboptimal performance at both the firm and aggregate levels. This is compounded by a decline in employee morale and job satisfaction across both national and expatriate workforces, driven by perceived inequities, job insecurity, and a lack of meaningful career development pathways. These factors fuel high turnover, creating a cycle of recruitment and retention challenges that undermines institutional stability and the transfer of knowledge. At a systemic level, a policy focus on quantitative quotas rather than qualitative development encourages "ceremonial adoption" by firms and risks misdirecting Qatar's valuable human capital away from the private sector, thereby constraining the innovation and competitiveness required to achieve the goals of Qatar National Vision 2030. The following table presents a synthesized view of these effects.

4. Policy Recommendations and Strategic Reforms

To mitigate the negative outcomes of skill mismatches identified under Qatarization, this section proposes a multi-layered reform agenda. It emphasizes demand-driven training, evidence-based placement, and institutional collaboration, with practical mechanisms to align national employment goals with labor market realities.

4.1 Demand-Driven Education and Training

4.1.1 Curricular Alignment with Industry Needs

A core element of Qatar's demand-driven education strategy is the imperative to align vocational and higher education systems with real-time industry demands. However, research consistently reveals significant gaps between the skills possessed by graduates and the competencies required by the nation's evolving labor market. A study of Qatar's postsecondary TVET institutions found a clear "mismatch between the TVET curricula and the 21st century skills required by the labor market," particularly in crucial non-technical areas like communication, leadership, problem-solving, and teamwork (Said, Pavlova, and Wheeler 2021). This challenge has been recognized at the policy level for over a decade; early educational reforms like *Education For a New Era* were explicitly designed to equip the Qatari workforce with these very skills to meet the country's changing needs (Romanowski and Nasser 2012).

A primary reason for this persistent gap is the weak linkage between educational providers and industry. A comprehensive study of Qatar's TVET system by Said (2021) documented a 'major

mismatch between the perceptions of TVET program leaders and employers' managers.' The research revealed that while employers prioritized social skills and digital literacy, TVET programs placed greater emphasis on theoretical knowledge like mathematical reasoning. This misalignment is exacerbated by a documented 'low level of engagement and collaboration' between companies and TVET institutions, hindering the co-development of relevant curricula (Said, Pavlova, and Wheeler 2020). An effective solution, strongly supported by their findings, is the establishment of robust, formal partnerships. This includes creating industry advisory boards to guide curriculum design, expanding internship and work placement opportunities, and establishing regular feedback loops to ensure educational programs remain responsive to market demands. As Qatar continues its transition toward a knowledge-based economy, such strategic alignment is not merely beneficial but essential for producing a generation of graduates who are both technically proficient and equipped with the critical thinking and adaptive skills necessary for innovation and global competitiveness (Zaidan et al. 2025; Alshawi, Ali, and Raïq 2023).

These policy goals are being actively pursued through a growing ecosystem of strategic partnerships. At the forefront is Qatar University (QU), which has positioned itself as the nation's "principal reservoir of knowledge and expertise" by explicitly aligning its strategic mission with the economic diversification goals of QNV 2030 (Wazen 2025). This high-level strategy is implemented through tangible initiatives, such as the College of Business and Economics (CBE) formalizing agreements with the Civil Service and Government Development Bureau to shape career training, and with industry leaders like Qatar Shell to foster youth entrepreneurship through its 'Shell Intilaaqah' program. The CBE is also proactively revamping its curriculum by integrating business simulations, technology like 3D printing, and partnerships with platforms like Coursera to enhance job readiness skills (CBE 2024). This model of deep industry integration is echoed across Qatar's educational landscape. Branch campuses in Education City, such as Texas A&M University at Qatar and Carnegie Mellon University in Qatar, maintain active collaborations with the energy and finance sectors to co-develop research and talent pipelines (Texas a&M University at Qatar n.d.; CMU-Q 2025). On a global scale, Qatar's engagement in initiatives like the IIE-WISE consortium on AI in higher education signals a commitment to not only addressing current skill gaps but also anticipating future workforce needs (IIE 2024).

Table 3. Key Education–Industry Collaboration Initiatives in Qatar

Initiative / Program	Institution(s) Involved	Description	Strategic Purpose
Shell Intilaaqah	Qatar University – College of Business and Economics (CBE) & Qatar Shell	Youth entrepreneurship development program in collaboration with industry	Cultivate entrepreneurial skills aligned with Qatar's economic diversification goals
Curriculum Innovation with Technology	Qatar University – CBE	Incorporation of 3D printing, business simulations, Coursera modules into curriculum	Improve job readiness through applied learning and digital fluency

Initiative / Program	Institution(s) Involved	Description	Strategic Purpose
Government Career Training MOU	Qatar University & Civil Service and Government Development Bureau	Formal collaboration for shaping career preparation pathways	Align public sector skills with national employment priorities
Research and Talent Pipelines	Texas A&M University at Qatar, CMU-Q	Long-term partnerships with energy and finance sectors	Co-develop talent pools and sector-relevant research
IIE-WISE International Consortium	Qatar Foundation & Institute of International Education (IIE)	Global research network on AI in higher education	Future-proof workforce strategies via emerging technology insights

Note: *This table synthesizes prominent initiatives aimed at improving the alignment between postsecondary education and national labor market demands in Qatar. Each program reflects an institutional effort to respond to skill mismatch challenges by fostering deeper public–private integration, applied training, and forward-looking workforce strategies.*

4.1.2 Apprenticeships and On-the-Job Training

Bridging the persistent divide between the classroom and the workplace is essential for Qatar's economic and human capital development. For decades, Qatar's education system has struggled to produce graduates with the necessary skills to meet the demands of a competitive global market, a challenge rooted in a systemic misalignment between educational supply and labor market demand (Al-Subaiey 2010). To close this gap, international best practice points to the critical role of structured, work-based education (WBL), including apprenticeships and on-the-job training. These models provide a direct mechanism for aligning learning with industry needs, a long-standing policy challenge in the Arab region (ILO 2008).

The benefits of such programs are well-documented globally. The International Labour Organization emphasizes that WBL enables students to acquire not only relevant technical competencies but also a suite of transferable skills, including communication, problem-solving, and teamwork (ILO 2022). Evidence shows that work-based education leads to smoother transitions into sustainable employment and provides employers with a pipeline of 'work-ready' talent (Osborne et al. 2020). Indeed, a multi-country ILO study found that students in combined work-study programs transitioned to employment significantly faster—an average of 1.9 months—than those in purely institution-based training (20.1 months) (Comyn and Brewer 2018).

Successfully implementing these models, however, requires a coordinated and supportive ecosystem. Merely identifying skill gaps is insufficient; a structured policy response is necessary. Best practices outlined by the ILO and other national bodies stress the need for a clearly articulated policy and governance framework to overcome barriers to effective WBL (ILO 2022; Osborne et al. 2020). This includes establishing strong partnerships between VET institutions,

industry, and social partners to ensure curricula are demand-driven and that roles and responsibilities are clearly defined.

Furthermore, policy levers are crucial for incentivizing participation. Financial instruments such as training levies, wage subsidies, and payroll tax rebates can encourage businesses to invest in apprenticeships and prevent the "poaching" of skilled workers by firms that do not contribute to training (Osborne et al. 2020). Equally important are basic legal standards to protect students during WBL periods, covering aspects like remuneration, working hours, and health and safety (ILO 2022). For Qatar, adopting such evidence-based frameworks is crucial to move beyond identifying skill gaps and toward building a truly integrated, demand-driven training system that supports its national development ambitions.

4.2 Career Counseling and Early Guidance

4.2.1 Sector-Embedded Career Services

A significant challenge for Qatar's human capital development is that Qatari youth often exhibit a "fragmented career orientation," where their career aspirations, their assessment of the importance of work, and their decisiveness about the future are not coherently aligned (Khattab et al. 2022). Decisions are frequently driven by powerful societal expectations and cultural norms rather than by informed, individual guidance (Momani 2025). This results in a persistent disconnect where students may express high interest in certain fields, such as science and mathematics, yet this interest does not translate into a corresponding aspiration to pursue a career in those areas, particularly when faced with the strong allure of high-status public sector employment (Sellami et al. 2017; Sellami et al. 2023).

Embedding structured career counseling within schools and universities is a critical mechanism to address this fragmentation. Effective guidance can help dismantle misconceptions and provide a realistic understanding of various sectors. For example, targeted information could correct negative perceptions surrounding industries like hospitality, which are often overlooked due to concerns about low pay and demanding work conditions (Al-Mohannadi 2025). Research on healthcare students in Qatar demonstrates that when institutional support—including dedicated faculty and academic advisors—is available, it serves as a key facilitator in helping students navigate complex career paths and overcome challenges (Yasin et al. 2024).

Therefore, building a national framework for career counseling requires more than simply offering advice; it necessitates creating a formal, integrated system. Drawing on international best practice, this involves establishing strong networks and partnerships between educational institutions, industry bodies, and social partners (ILO 2022). Such a sector-embedded approach ensures that career guidance is not abstract but is directly linked to the evolving needs of Qatar's economy, thereby helping students make choices that align their skills and ambitions with tangible opportunities.

4.2.2 Psychometric and Competency Assessments

At a strategic level, the effective use of psychometric and competency assessments aligns directly with the priorities set by major international organizations for tackling skills mismatch. The OECD, for instance, emphasizes that for countries to thrive, they must move beyond simply tracking educational attainment and focus on developing and effectively utilizing a broad set of skills, including transversal cognitive abilities like critical thinking and problem-solving alongside

social and emotional skills (OECD 2019). The OECD Skills Strategy framework explicitly calls for policies that "reduce skills imbalances" and "make intensive use of skills in the economy," goals that are predicated on having reliable methods to assess competencies.

In this context, competency-based assessments serve as a critical instrument for bridging the gap between education and employment. The International Labour Organization (ILO) reinforces this by advocating for VET systems that are demand-driven and produce work-ready graduates. Central to this is the implementation of Competency-Based Training (CBT), a structured system designed to ensure learners acquire the specific skills and knowledge required for a given occupation (ILO 2022). Job placement tools like psychometric and job knowledge tests are the very mechanisms used to validate these competencies at the point of entry, ensuring that the skills developed through education are the ones demanded by the labor market.

However, the implementation of such assessments requires careful consideration. While they offer a systematic method for comparing candidates (Charles and Florah 2021), research also highlights their potential to introduce bias and disadvantage certain groups if not applied holistically. Studies in health professions, for example, show conflicting data on their predictive validity and underscore the risk of excluding otherwise qualified candidates from under-represented backgrounds ((Jakirlic, Ooley, and Hoppe 2021). This presents a critical challenge for a national policy like Qatarization, which aims to be inclusive.

A promising approach to mitigate these risks while retaining the benefits of assessment is the use of practice employment tests. Research by Campion, Campion, and Campion (2019) demonstrates that offering practice tests can simultaneously improve outcomes for both employers and job seekers. For candidates, it reduces uncertainty and provides a short-term opportunity to build human capital. For organizations, it results in a higher-quality applicant pool and has been shown to reduce adverse impact against minority groups. Integrating such evidence-based tools ensures that the drive to meet nationalization targets is supported by a commitment to effective and equitable placement, thereby fostering greater employee success and long-term retention.

4.3 Flexible Quota Mechanisms and Implementation

4.3.1 Strategic Quota Differentiation

Rigid, one-size-fits-all quota systems can compel firms to prioritize compliance over performance, leading to unintended negative consequences. Research on Saudi Arabia's Nitaqat program, for example, found that firms below their mandated quotas often hired lower-wage, lower-skilled nationals and reduced their overall labor force, which negatively impacted their export values and increased their likelihood of exiting the market (Cortés, Kasoolu, and Pan 2021). This illustrates how a focus on a "numbers game" can undermine genuine human capital development. Indeed, merely increasing the proportion of national staff does not guarantee better performance and may even adversely affect non-financial outcomes if not managed effectively (Fatima and Elbanna 2025).

A more effective strategy involves tailoring nationalization targets to the specific realities of different economic sectors, acknowledging the existing skills mismatch between the national labor supply and employer needs. Studies in Qatar have highlighted a significant gap between the skills taught in technical and vocational education (TVET) programs and the competencies

demanded by industries like finance and banking (Said and Alhares 2021). Therefore, a flexible quota mechanism should allow for exemptions or adjusted targets in roles with documented shortages of qualified nationals. This flexibility, however, must be coupled with a commitment to long-term human capital investment. Fostering effective workforce integration through strategic training and educational reforms is essential to ensure that nationalization policies build true capability rather than just enforcing statistical compliance (Fatima and Elbanna 2025; Said and Alhares 2021).

4.3.2 Instruments for Phased and Agile Implementation

To operationalize a more flexible and effective approach to nationalization, policymakers can employ specific instruments like temporary waivers and targeted pilot programs. These tools move beyond rigid compliance, focusing instead on long-term human capital development.

Temporary waivers could allow a firm to defer strict quota fulfillment in exchange for verifiable investments in skill-building, such as sponsoring a national student through a multi-year degree or a structured apprenticeship program. This approach directly addresses the concern that quotas can lead to hiring under-qualified nationals by ensuring that when placements occur, they are aligned with genuine, developed competencies (Elbanna and Fatima 2022). It transforms the policy from a simple headcount requirement into a mechanism for public-private partnership in talent creation.

Similarly, pilot programs in strategic sectors like technology, finance, or specialized industrial fields can serve as low-risk testbeds for new nationalization strategies. By monitoring these focused initiatives, policymakers can gather crucial data on what works, refining policies based on real-world outcomes before a nationwide rollout (Elbanna 2022). This evidence-based approach is essential for designing policies that effectively balance national employment goals with the complex economic and operational realities of key industries (Durand-Lasserve 2022).

4.4 Public–Private Coordination and Institutional Oversight

4.4.1 Inter-Ministerial Talent Councils

To ensure successful policy implementation and institutional oversight, a cross-ministerial coordination council is essential. The International Labour Organization (ILO) stresses that achieving policy coherence for sustainable development (SDG 17) depends on such mechanisms, championing a “tripartite” approach involving government, employers, and workers in a continuous social dialogue (ILO 2016).

The need for such a structure is amplified by the intricate dynamics of labor nationalization. As economic modeling of the Saudi Arabian labor market shows, policies like quotas, levies on foreign workers, and wage subsidies have complex, sometimes counterintuitive, effects on employment due to the large public-private wage gap and other market frictions. Relying on simple headcount metrics can obscure these realities and lead to ineffective policy (Durand-Lasserve 2022).

An effective council would therefore move beyond simple metrics to function as the hub of a “networked governance” system. Research on public-private partnerships in education suggests that sustainability is enhanced when different actors play distinct roles. Public-sector bodies can perform a *directing* function—setting direction and providing oversight—while private-sector

intermediaries, like industry associations, can play a *representing* role, aggregating the needs and capacities of their members. This division of labor creates a fairer and more resilient partnership, which is crucial for long-term success (Caves and Oswald-Egg 2023).

4.4.2 Employer Incentives for Upskilling Nationals

To shift employer focus from compliance to capability-building, incentives must be carefully designed and embedded within a coordinated public-private framework. While financial incentives like wage subsidies are common tools, their effectiveness can be blunted by pre-existing quota systems (Durand-Lasserve 2022). For example, the Nitaqat policy in Saudi Arabia, which relied heavily on quotas, successfully increased the number of Saudi nationals in the private sector but did so by encouraging firms to hire lower-wage, lower-skilled workers to meet headcount targets, undermining firm productivity and the goal of upskilling (Cortés, Kasoolu, and Pan 2021).

Effective upskilling therefore requires a more sophisticated governance network. This involves public-sector bodies playing a directing role—perhaps by funding training grants through a mechanism like the Human Resource Development Fund (HRDF)—while private-sector intermediaries, such as industry associations, play a representing role by aggregating employer needs and ensuring training is relevant, a model proven successful in vocational education systems (Caves and Oswald-Egg 2023).

4.5 Competency-Based Placement and Lifelong Learning

4.5.1 Certification-Aligned Recruitment

A key challenge in labor nationalization is transitioning employers from a compliance mindset, focused on meeting hiring quotas, to a strategic one centered on capability-building. While governments utilize incentives to encourage this shift, their design and the institutional context in which they are deployed are critical for success.

- **The Employer's Perspective: Qualifications vs. Competence**: Research consistently shows that while employers use formal qualifications as a crucial screening tool for new recruits—where other information is scarce—and to manage regulatory compliance, they often place a higher value on demonstrated experience and "employability skills" like attitude and communication (Ridoutt et al. 2005). This creates a significant challenge in the Arab States, where a well-documented "skills mismatch" means that even certified individuals may not possess the skills employers need. The fact that unemployment is often highest for those with secondary-level education points to a disconnect between training provision and labor market demand (ILO 2008). Simply mandating certifications without addressing their relevance may not solve the underlying issue.
- **The Modern Role of National Qualifications Frameworks (NQFs)**: To bridge this gap, modern NQFs are being designed as comprehensive and permeable systems. As Cedefop (2025) notes, the role of NQFs is expanding beyond simply cataloging formal degrees. They are increasingly structured to support lifelong learning by creating pathways between formal, non-formal, and informal learning. This evolution is critical, as it provides a formal mechanism for the validation and recognition of skills acquired through experience—the very thing employers value highly. By defining qualifications based on learning outcomes (what a person knows and can do) rather than just

educational inputs, an NQF allows for a more flexible and realistic assessment of an individual's capabilities.

For Qatar, this presents a powerful opportunity to directly address the skill mismatches hindering Qatarization and advance the Human Development pillar of Qatar National Vision 2030. By strengthening and expanding Qatar's own National Qualifications Framework, policymakers can create a trusted, unified standard. This framework would serve multiple strategic goals: it would provide a common language for employers and educational institutions to co-design relevant curricula; it would give the private sector greater confidence in the competencies of Qatari graduates; and it would guide students toward qualifications that are in high demand, fostering a truly knowledge-based economy. Success requires elevating the NQF from a technical registry to the cornerstone of the national talent strategy, ensuring that recruitment is not just certification-aligned, but truly competency-based and integrated into a national vision for lifelong learning.

4.5.2 Continuous Professional Development

While competency-based recruitment is critical for initial job placement, a sustainable Qatarization strategy must also foster long-term career progression. This requires moving beyond entry-level qualifications to a system that supports continuous professional growth throughout a national's career.

- **The Role of Individualized Professional Development**: A proven mechanism for this is the Individualized Professional Development (IPD) plan, a structured tool that helps employees set clear career goals and identify the specific training and experiences needed to achieve them (Head Start 2025). Such plans formalize the career pathway, ensuring that development is intentional rather than accidental. For the employee, the plan provides a clear roadmap for advancement; for the employer, it aligns individual growth with the organization's strategic needs, ensuring a better return on training investments (OPM n.d.).

- **Fostering a Culture of Lifelong Learning**: Beyond the plan itself, a successful career development strategy hinges on cultivating a mindset of lifelong learning. In a rapidly evolving global economy, the ability to adapt, reskill, and embrace change is essential for sustained employability. As Johnson (2023) notes, continuous learning is no longer a periodic activity but a crucial "attitude for career and life success." By encouraging this mindset, individuals take ownership of their development, proactively seeking new skills to remain relevant and valuable in their fields.

To ensure the long-term success of Qatarization, these principles should be embedded into the national talent framework. It is recommended that Qatar's human resource policies encourage the adoption of Individualized Professional Development (IPD) plans, particularly in strategic sectors targeted by Qatar National Vision 2030. This could be incentivized through co-funded training programs or linked to performance management cycles within government and semi-government entities. By championing both the structured planning of career development and the underlying culture of lifelong learning, Qatar can ensure that its national workforce is not only employable upon graduation but adaptable, innovative, and capable of leading its knowledge-based economy for decades to come.

4.6 Data-Driven Workforce Planning and the Role of LMIS

A foundational pillar for effective Qatarization lies in the strategic use of real-time data to align national talent with economic needs. At the heart of this strategy is the Labour Market Information System (LMIS), a priority initiative being developed by the Ministry of Labour (MOL) in collaboration with key partners, including the International Labour Organization (ILO) and the UN's Economic and Social Commission for Western Asia (ESCWA) (ILO Project Office for the State of Qatar 2025; MoL 2024a). When fully operational, the LMIS will provide dynamic, granular visibility into skill supply and demand, enabling evidence-based planning that directly supports the goals of the National Development Strategy (NDS3) and Qatar National Vision 2030.

The system's design moves beyond simple data collection to create a responsive ecosystem. Key inputs include:

- **Demand Forecasting:** The nationwide Establishment Skills Survey (ESS) and targeted sectoral studies will identify current and future skill gaps directly from employers (ILO Project Office for the State of Qatar 2025).
- **Supply Analysis:** A modernized labour force survey and tracer studies of graduates, such as the one being developed with Qatar Foundation, will provide a clear picture of the national talent pool (ILO Project Office for the State of Qatar 2025).
- **A Common Language:** The entire system is structured around the Qatar National Occupational Classification (QNOC), which provides a unified, skills-based language for jobs and competencies, and is being aligned with international standards like ISCO and ESCO to ensure global comparability (MoL 2024d; ILO Project Office for the State of Qatar 2025).

Embedding the LMIS into Qatar's governance framework is a strategic imperative. It provides the analytical power to shift nationalization policies from a focus on quantitative targets to a qualitative focus on competency-based employment and productivity. It allows educational institutions to align curricula with real-time labor market needs, as envisioned by the Doha Declaration on Education and Skills for Future Jobs, and enables employers to engage in more precise talent management. As such, the LMIS is not merely a data repository; it is a transformative enabler of long-term labor market efficiency and a cornerstone for building the "future-ready workforce" that Qatar's diversified, knowledge-based economy requires (ILO Project Office for the State of Qatar 2025; OECD 2020).

5. Conclusion

The advancement of Qatarization in high-skilled sectors represents a strategic intersection of governmental vision, private-sector collaboration, and cultural adaptation. While substantial strides have been achieved in increasing the presence of nationals in the workforce, the evidence reviewed in this report indicates that when nationalization is pursued without a concurrent, strategic focus on skill alignment and human capital integration, it can generate significant unintended inefficiencies. Key consequences include direct productivity losses, a decline in workforce morale, heightened turnover challenges, and systemic distortions that may hinder long-term economic diversification.

Productivity is impaired as the misallocation of talent—whether through over-qualification, skill gaps, or "phantom employment"—leads to suboptimal performance at both the firm and aggregate levels. This is compounded by a decline in employee morale and job satisfaction across both national and expatriate workforces, driven by perceived inequities, job insecurity, and a lack of meaningful career development pathways. These factors fuel high turnover, creating a cycle of recruitment and retention challenges that undermines institutional stability and the transfer of knowledge.

At a systemic level, a policy focus on quantitative quotas rather than qualitative development encourages "ceremonial adoption" by firms and risks misdirecting Qatar's valuable human capital away from the private sector, thereby constraining the innovation and competitiveness required to achieve the goals of Qatar National Vision 2030. The following table presents a synthesized view of these effects.

Table 4. A Synthesis of the Consequences of Skill Mismatch under Qatarization

Domain	Key Issues Identified in the Literature	Representative Sources
Productivity & Efficiency	Misaligned placements and poor task allocation reduce individual and organizational productivity; inefficient use of human capital.	McGowan & Andrews (2015a); Fatima & Elbanna (2025); Al-Yafei (2022).
Morale & Job Satisfaction	Lowered motivation and job satisfaction among both nationals (due to unmet expectations and perceived inequities) and expatriates (due to job insecurity and poor integration).	Al-Mansoori (2018); Al-Subaiey (2010); Irfan et al. (2024).
Turnover & Retention	Increased turnover intention and retention challenges driven by job-person mismatch, over-qualification, limited career paths, and job insecurity for both national and expatriate staff.	Chen, Tang, and Su (2021); Elbanna & Fatima (2022); Zeffane & Bani Melhem (2017); Al-Mansoori (2018).
Institutional & Economic Outcomes	Focus on quotas encourages symbolic compliance ("ceremonial adoption") over strategic human capital development; misallocation of labor away from the private sector undermines long-term economic diversification and productivity growth.	Elbanna & Fatima (2022); McGowan & Andrews (2017); Qatar National Vision 2030.

Note: *Sources compiled by the authors based on academic and institutional research cited in Sections 3.1–3.4.*

Key Takeaways:

1. **Integrated Workforce Ecosystems:** Foster deep collaboration between academia, industry, and government. Implement structured internships, mentorship programs, and a data-driven LMIS to align educational outcomes with labor market needs.

2. **Private-Sector Incentivization and Policy Agility:** Enhance private-sector incentives for strategic national training, particularly in STEM and technology. Replace rigid quotas with an agile system featuring needs-based adjustments, temporary waivers, and pilot programs.

3. **Cultural and Individual Recalibration:** Launch targeted campaigns to enhance the prestige of private-sector and technical careers. Embed structured career counseling and competency assessments within the education system to align student aspirations with economic opportunities.

4. **Digital and STEM Upskilling:** Scale and diversify digital learning and STEM initiatives to foster workforce agility and adaptability. Prioritize training programs that equip nationals with the future-proof skills needed for a knowledge-based economy.

5. **Sustainable Development through Workforce Equity:** Integrate workforce equity into corporate and public-sector practices to ensure fair, merit-based career advancement. Strengthen leadership development and succession planning to build a sustainable pipeline of national talent.

Ultimately, Qatar's successful economic diversification and workforce development depend on a fundamental shift from compliance-driven Qatarization to a holistic, capability-based approach. The proactive harmonization of data-driven policy, agile educational reforms, and dynamic private-sector partnerships is essential. Organizations and institutions that champion these strategic imperatives will be pivotal in building the resilient, innovative, and productive human capital required to secure Qatar's sustainable national growth.

Acknowledgement:
This study was developed as part of the labor market research initiatives undertaken by the Ministry of Labor of Qatar. We gratefully acknowledge the Ministry's support in providing guidance and resources, which enabled a thorough examination of the unintended skill mismatches emerging from Qatarization policies and their implications for productivity, job satisfaction, and economic transformation.

6. References

1. Abdulwahed, Mahmoud. 2016. *The Attributes of Future 2030 Engineers in Qatar for Innovation and Knowledge Based Economy*. *2016 ASEE International Forum*. American Society for Engineering Education. https://doi.org/10.18260/1-2--27261.

2. Al-Mansoori, Salha. 2018. "The Impact of Qatarization on Motivation and Job Performance." Master's thesis, Qatar University College of Business and Economics. https://qspace.qu.edu.qa/bitstream/handle/10576/11450/Salha%20Al-Mansoori_OGS%20Approved%20Project.pdf?sequence=1&isAllowed=y.

3. Al-Mohannadi, Noora. 2025. "Unlocking Potential: Addressing Societal and Economic Barriers for Qatari Youth in the Tourism and Hospitality Sector." *Journal of Ecohumanism* 4 (1): 3096–3118. https://doi.org/10.62754/joe.v4i1.6110.

4. Alshawi, Ali a. Hadi, Abdel-Samad M. Ali, and Hicham Raïq. 2023. "Skill Components of Higher Education in the Era of Sustainable Development: An Analytical Study Among University Students in Qatar." *Frontiers in Education* 8–2023 (April). https://doi.org/10.3389/feduc.2023.1141306.

5. Al-Subaiey, Maryam. 2010. "Qatarization Policy – Implementation Challenges." *Brookings*. Brookings Doha Center. Accessed June 8, 2025. https://www.brookings.edu/wp-content/uploads/2016/07/06_bdc_essay_winner.pdf.

6. Al-Yafei, Mohammed. 2022. "QATARIZATION PRACTICES AT QATAR GENERAL ELECTRICITY AND WATER CORPORATION (KAHRAMAA): CHALLENGES AND FUTURE CONSIDERATIONS." Master's thesis, Qatar University College of Business and Economics. http://hdl.handle.net/10576/26681.

7. Ashmawi, Ahmed, ed. 2015. *The Skills Mismatch in the Arab World: A Critical View | British Council*. *Cairo Symposium 2015*. British Council. https://www.britishcouncil.org.eg/en/symposium/thought-pieces/skills-mismatch-arab-world-critical-view.

8. Basahal, Abdulrahman, Chris Forde, and Robert MacKenzie. 2023. "Labour Market Localisation Policies and Organizational Responses: An Analysis of the Aims and Effects of the Saudi Nitaqat Reforms." *International Journal of Organizational Analysis* 31 (4): 1024–36. https://doi.org/10.1108/ijoa-03-2021-2681.

9. Bunglawala, Zamila. 2011. "Young, Educated and Dependent on the Public Sector: Meeting Graduates' Aspirations and Diversifying Employment in Qatar and the UAE." 4. *Brookings Doha Center Analysis Paper*. Brookings Institution. Accessed June 22, 2025. https://www.brookings.edu/wp-content/uploads/2016/06/1215_qatar_diversify_employment_bunglawala_english.pdf.

10. Campion, Michael C, Emily D Campion, and Michael A Campion. 2019. "Using Practice Employment Tests to Improve Recruitment and Personnel Selection Outcomes for Organizations and Job Seekers." *Journal of Applied Psychology (J Appl Psychol)* 104 (9): 1089–1102. https://doi.org/10.1037/apl0000401.

11. Carnegie Mellon University in Qatar (CMU-Q). 2025. "Doha Bank and CMU-Q Sign MoU to Strengthen Collaboration in Education, Research, and Community Development." February 17, 2025. Accessed June 24, 2025. https://www.qatar.cmu.edu/news/doha-bank-and-cmu-q-sign-mou-to-strengthen-collaboration-in-education-research-and-community-development/.

12. Caves, Katherine, and Maria Esther Oswald-Egg. 2023. "The Networked Role of Intermediaries in Education Governance and Public-private Partnership." *Journal of Education Policy* 39 (1): 40–63. https://doi.org/10.1080/02680939.2023.2190166.

13. Cedefop. 2025. "Recognising All Learning: The Expanding Role of National Qualifications Frameworks: Why Recognising All Learning Is a Policy Imperative." June 13, 2025.

Accessed June 25, 2025. https://www.cedefop.europa.eu/en/news/recognising-all-learning-expanding-role-national-qualifications-frameworks.

14. Charles, Babu Karan, and Oluoch Mercy Florah. 2021. "A Critical Review of Literature on Employment Selection Tests." *Journal of Human Resource and Sustainability Studies* 9 (3): 451–69. https://doi.org/10.4236/jhrss.2021.93029.

15. Chen, Guofu, Yanzhao Tang, and Yawen Su. 2021. "The Effect of Perceived Over-Qualification on Turnover Intention From a Cognition Perspective." *Frontiers in Psychology* 12 (October). https://doi.org/10.3389/fpsyg.2021.699715.

16. Comyn, Paul, and Laura Brewer. 2018. "Does Work-based Learning Facilitate Transitions to Decent Work?" *EMPLOYMENT Working Paper*, July. https://www.ilo.org/publications/does-work-based-learning-facilitate-transitions-decent-work.

17. Constant, Samantha, Edward Sayre, and Nada Abdelkader. 2015. "Implications of Qatarization: Qualitative Assessment and Possible Policy Responses." Jadaliyya. March 5, 2015. Accessed May 29, 2025. https://www.jadaliyya.com/Details/31848.

18. Cortes, Patricia, Semiray Kasoolu, and Carolina Pan. 2020. "Labor Market Nationalization Policies and Firm Outcomes: Evidence From Saudi Arabia." 381. *CID Faculty Working Paper*. The President and Fellows of Harvard College. Accessed June 23, 2025. https://www.hks.harvard.edu/centers/cid/publications/faculty-working-papers/labor-market-nationalization-saudi-arabia.

19. Cortés, Patricia, Semiray Kasoolu, and Carolina Pan. 2021. "Labor Market Nationalization Policies and Exporting Firm Outcomes: Evidence From Saudi Arabia." Working Paper 29283. *National Bureau of Economic Research (NBER)*. National Bureau of Economic Research (NBER). Accessed June 25, 2025. https://doi.org/10.3386/w29283.

20. Dalloul, Abdalrahman, Rashad Amanulla, and Said Elbanna. 2021. "Nationalization of Workforce in the GCC Banking Sector: The Case of Alpha Bank in Qatar." *The Case Centre*, June, 1–13. https://www.thecasecentre.org/products/view?id=177244.

21. Das, Kailash, and Nilambari Gokhale. 2010. "Omanization Policy and International Migration in Oman." Middle East Institute (MEI). February 2, 2010. Accessed June 13, 2025. https://www.mei.edu/publications/omanization-policy-and-international-migration-oman.

22. Doha News Team. 2013. "Survey: Gulf-wide Nationalization Efforts Face Similar Stumbling Blocks." *Doha News*, May 13, 2013. Accessed June 13, 2025. https://dohanews.co/survey-gulf-wide-nationalization-efforts-face-similar/.

23. Durand-Lasserve, Olivier. 2022. "Nationalization of the Private Sector Labor Force, Quotas, Matching and Public Jobs, an Illustration With Saudi Arabia." *The Quarterly Review of Economics and Finance* 86 (June): 98–117. https://doi.org/10.1016/j.qref.2022.06.004.

24. Elbanna, Said. 2022. "Policy and Practical Implications for Workforce Nationalization in the Gulf Cooperation Council (GCC) Countries." *Personnel Review* 51 (4). https://doi.org/10.1108/PR-11-2020-0835.

25. Elbanna, Said, and Tahniyath Fatima. 2022. "Quantifying People in the GCC Region: The Uses, Challenges, and Efficacy of the Quota System Policy." *Human Resource Development International* 26 (3): 292–316. https://doi.org/10.1080/13678868.2022.2116260.

26. Elbanna, Said, Shatha Obeidat, Heba Younis, and Tamer Elsharnouby, eds. 2023. *An Evidence-Based Review on Nationalization of Human Resources in the GCC Countries*. *The Administrative Sciences Association Conference*. https://qspace.qu.edu.qa/bitstream/handle/10576/44268/Review_Nationalworkforce_ASAC.pdf.

27. Elsharnouby, Tamer, Heba Younis, Said Elbanna, and Nasrina Mauji. 2023. "Voicing Perceptions of Local Job Seekers and Employees Toward Workforce Nationalization and Employment." *Employee Relations* 45 (3): 615–36. https://doi.org/10.1108/er-04-2022-0178.

28. European Centre for the Development of Vocational Training (Cedefop). 2015. "Skill Shortages and Gaps in European Enterprises: Striking a Balance Between Vocational Education and Training and the Labour Market." Cedefop reference series; No 102. *Cedefop*. Luxembourg: Publications Office of the European Union. Accessed June 13, 2025. https://www.cedefop.europa.eu/en/publications/3071.

29. Fatima, Tahniyath, and Saïd Elbanna. 2025. "Beyond the Numbers Game: Understanding Organizational Response to Nationalization Policy in the Middle East." *Journal of International Management*, June. https://doi.org/10.1016/j.intman.2025.101272.

30. Gasal. n.d. "Qatarization: It Is One of the Main Pillars of Qatar National Vision 2030." Accessed June 13, 2025. https://www.gasal.com.qa/about-us/careers/qatarization.

31. General Secretariat For Development Planning (GSDP). 2008. "Qatar National Vision 2030." Press release. July 2008. Accessed May 22, 2025. https://www.npc.qa/en/QNV/Documents/QNV2030_English_v2.pdf.

32. Gonzalez, Gabriella, Lynn Karoly, Louay Constant, Hanine Salem, and Charles Goldman. 2008. "Human Resource Challenges and Reform Efforts in Qatar, UAE, Oman, and Lebanon." In *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates: Executive Summary*, 1st ed., 29–46. RAND Corporation. http://www.jstor.org/stable/10.7249/mg786-1rc.9.

33. Head Start. 2025. "Individualized Professional Development Plans to Support Career Pathways." June 16, 2025. Accessed June 25, 2025. https://headstart.gov/professional-development/article/individualized-professional-development-plans-support-career-pathways.

34. Hertog, Steffen. 2014. "Arab Gulf States : An Assessment of Nationalisation Policies." Research Paper No. 1/2014. *Gulf Labour Markets, Migration and Population (GLMM)*. Gulf Labour Market and Migration (GLMM) programme of the Migration Policy Center (MPC) and the Gulf Research Center (GRC). Accessed June 13, 2025. https://gulfmigration.grc.net/wp-content/uploads/2023/01/GLMM-ResearchPaper_01-2014.pdf.

35. ———. 2025. "When Rentier Patronage Breaks Down: The Politics of Citizen Outsiders on Gulf Oil States' Labour Markets." *Studies in Comparative International Development*, February. https://doi.org/10.1007/s12116-024-09455-x.

36. ILO Project Office for the State of Qatar. 2025. "Progress Report on the Technical Cooperation Programme Between the Government of Qatar and the ILO." *International Labour Organization (ILO)*. Paris: ILO Publications. Accessed June 25, 2025. https://www.ilo.org/publications/progress-report-technical-cooperation-programme-between-government-qatar-0.

37. Institute of International Education (IIE). 2024. "International Research Consortium Launches Global AI in Higher Education Collaboration." September 17, 2024. Accessed June 24, 2025. https://www.iie.org/news/iie-wise-launch-international-research-consortium-ai-in-higher-education/.

38. International Labour Office (ILO). 2008. *Skills for Employability of Workers and Productivity of Enterprises in Arab States*. *Arab Forum on Development and Employment*. Geneva, Switzerland: ILO Publications. https://www.ilo.org/resource/conference-paper/skills-employability-workers-and-productivity-enterprises-arab-states.

39. International Labour Organization (ILO). 2016. "NATIONAL EMPLOYMENT POLICIES." *International Labour Organization (ILO)*. Geneva, Switzerland: ILO Publications. Accessed June 25, 2025. https://www.ilo.org/media/57186/download.

40. ———. 2020. "What Is Skills Mismatch and Why Should We Care?: A Key Question to Ensure a Decent Future of Work." April 1, 2020. Accessed June 13, 2025. https://www.ilo.org/resource/article/what-skills-mismatch-and-why-should-we-care.

41. ———. 2022. "Strengthening Work-based Learning in VET Institutions." *International Labour Organization (ILO)*. Geneva, Switzerland: ILO Publications. Accessed June 24, 2025. https://www.ilo.org/publications/strengthening-work-based-learning-vet-institutions.

42. ———. 2023. "Towards a New Oman Decent Work Country Programme." *International Labour Organization (ILO)*. International Labour Organization (ILO). Accessed June 13, 2025. https://www.ilo.org/publications/towards-new-oman-decent-work-country-programme.

43. ———. 2024. "Skills Mismatch in Europe: Statistics Brief." ISBN: 9789221290438 (print);9789221290445 (web pdf). *International Labour Organization (ILO)*. Geneva: International Labour Organization (ILO), Department of Statistics. Accessed June 14, 2025. https://www.ilo.org/publications/skills-mismatch-europe-statistics-brief.

44. International Monetary Fund (IMF). Middle East and Central Asia Dept. 2024. "Qatar: Selected Issues." *IMF Staff Country Reports*, no. 2024(044) (February). https://doi.org/10.5089/9798400267321.002.A001.

45. Irfan, Muhammad, Aso Kurdo Ahmed, Saeideh Shariati Najafabadi, Fariba Azizzadeh, Muhammad Ali, Mohammad Shahidul Islam, and Umara Noreen. 2024. "Factors Influencing Expatriate Employees' Commitment to the Private Sector in Qatar." *The*

International Journal of Interdisciplinary Social and Community Studies 19 (2): 1–22. https://doi.org/10.18848/2324-7576/cgp/v19i02/1-22.

46. Jakirlic, Naida, Caroline Ooley, and Elizabeth Hoppe. 2021. "Standardized Tests as Predictors of Success in Health Professions Education: A Scoping Review." *The Journal of the Association of Schools and Colleges of Optometry* 47 (1). https://journal.opted.org/article/standardized-tests-as-predictors-of-success-in-health-professions-education-a-scoping-review/.

47. Johnson, Grace. 2023. "Lifelong Learning: An Essential Attitude for Career and Life Success." ISACA. November 1, 2023. Accessed June 25, 2025. https://www.isaca.org/resources/isaca-journal/issues/2023/volume-6/lifelong-learning-an-essential-attitude-for-career-and-life-success.

48. Khattab, Nabil, Muznah Madeeha, Tariq Modood, Muthanna Samara, and Areej Barham. 2022. "Fragmented Career Orientation: The Formation of Career Importance, Decidedness and Aspirations Among Students." *International Journal of Adolescence and Youth* 27 (1): 45–59. https://doi.org/10.1080/02673843.2021.2025114.

49. Khodr, Hiba. 2011. "The Dynamics of International Education in Qatar : Exploring the Policy Drivers Behind the Development of Education City." *Journal of Emerging Trends in Educational Research and Policy Studies* 2 (6): 514–25. https://journals.co.za/content/sl_jeteraps/2/6/EJC135457.

50. McGowan, Adalet, and Dan Andrews. 2015a. "Labour Market Mismatch and Labour Productivity: Evidence From PIAAC Data." No. 1209. *OECD Economics Department Working Papers*. Paris: OECD Publishing. Accessed June 23, 2025. https://doi.org/10.1787/5js1pzx1r2kb-en.

51. ———. 2015b. "Skill Mismatch and Public Policy in OECD Countries." 1210. *OECD Economics Department Working Papers*. Paris: OECD Publishing. Accessed June 24, 2025. https://doi.org/10.1787/5js1pzw9lnwk-en.

52. ———. 2017. "Skills Mismatch, Productivity and Policies: Evidence From the Second Wave of PIAAC." 1403. *OECD Economics Department Working Papers*. Paris: OECD Publishing. Accessed June 24, 2025. https://doi.org/10.1787/65dab7c6-en.

53. Middle East Briefing. 2025. "Saudi Arabia Expands Saudization Requirements in Key Professions: 2025 Compliance." February 3, 2025. Accessed June 13, 2025. https://www.middleeastbriefing.com/news/saudi-arabia-expands-saudization-requirements-in-key-professions-2025-compliance/.

54. Ministry of Labour (MoL). 2024a. "Ministry of Labour Signs Cooperation Agreement With the United Nations Economic and Social Commission for Western Asia (ESCWA) to Develop the Labour Market Information System." April 29, 2024. Accessed May 25, 2025. https://www.mol.gov.qa/En/MediaCenter/Pages/NewsDetails.aspx?itemid=389.

55. ———. 2024b. "Ministry of Labour Highlights Law No. (12) of 2024 on Job Nationalization in the Private Sector." September 1, 2024. Accessed June 7, 2025. https://www.mol.gov.qa/En/mediacenter/Pages/NewsDetails.aspx?itemid=458.

56. ———. 2024c. "Under the Patronage of His Excellency the Prime Minister and Minister of Foreign Affairs, the Minister of Labour Unveils the National Strategy for an Effective and Highly Productive Workforce 2024–2030." November 5, 2024. Accessed June 7, 2025. https://www.mol.gov.qa/En/mediacenter/Pages/NewsDetails.aspx?itemid=500.

57. ———. 2024d. "Ministry of Labour Issues Updated Version of the Job Title Description and Classification Guide for the Private Sector." December 1, 2024. Accessed June 25, 2025. https://www.mol.gov.qa/En/mediacenter/Pages/NewsDetails.aspx?itemid=520.

58. Mohannadi, Issa M. Al, Khalid Kamal Naji, Galal M. Abdella, Hamad Nabeel, and Abdel Magid Hamouda. 2024. "Towards a Resilient Organization: Lessons Learned From the Oil and Gas Sector in Qatar." *Sustainability* 16 (1). https://doi.org/10.3390/su16010109.

59. Momani, Rula. 2025. "Higher Education and Workforce Participation in Qatar: Unravelling the Disparity." In *Gulf Studies*, edited by Esmat Zaidan, Evren Tok, Asmaa Al-Fadala, and Logan Cochrane, 21:445–62. Singapore: Springer. https://doi.org/10.1007/978-981-97-9667-0_22.

60. Mrad, Jessica Abou, Nour Mohamad Fayad, and Hala Zeineh. 2025. "Analyzing the Impact of Higher Education on Economic Growth in Qatar." *Edelweiss Applied Science and Technology* 9 (1): 546–63. https://doi.org/10.55214/25768484.v9i1.4182.

61. Nejad, Zahra. 2016. "QATARI YOUTH UNEMPLOYMENT: EVALUATING QATARI GOVERNMENTAL INITIATIVES: QATARIZATION POLICY THROUGH BEDAYA CENTER." Thesis-Master of Arts, Qatar University, College of Arts and Sciences. https://qspace.qu.edu.qa/bitstream/handle/10576/5108/444584_pdfconv_EA7F272A-3B35-11E6-9453-4E4C59571AF4.pdf?sequence=1&isAllowed=y.

62. OECD. 2019. *OECD Skills Strategy 2019: Skills to Shape a Better Future*. Paris: OECD Publishing. https://doi.org/10.1787/9789264313835-en.

63. ———. 2020. "Increasing Adult Learning Participation: Learning From Successful Reforms." In *Getting Skills Right*. Paris: OECD Publishing. https://doi.org/10.1787/cf5d9c21-en.

64. Osborne, Kristen, Maree Ackehurst, Leesha Chan, and Rose-Anne Polvere. 2020. "Work-based Education in VET." 978-1-925717-60–0. *National Centre for Vocational Education Research (NCVER)*. National Centre for Vocational Education Research (NCVER). Accessed June 24, 2025. https://www.ncver.edu.au/research-and-statistics/publications/all-publications/work-based-education-in-vet.

65. Palmer, Robert. 2017. "Jobs and Skills Mismatch in the Informal Economy." ISBN: 978-92-2-131613-8. *International Labour Organization (ILO)*. International Labour Organization (ILO). Accessed June 13, 2025. https://www.ilo.org/publications/jobs-and-skills-mismatch-informal-economy.

66. Planning and Statistics Authority (PSA). 2018. "Qatar Second National Development Strategy 2018-2022." *National Planning Council (NPC)*. Accessed June 8, 2025. https://www.psa.gov.qa/en/knowledge/Documents/NDS2Final.pdf.

67. ———. 2024. "Third Qatar National Development Strategy 2024–2030." Press release. January 2024. Accessed June 8, 2025. https://www.npc.qa/en/planning/nds3/Documents/QNDS3_EN.pdf.

68. PricewaterhouseCoopers (PwC). 2022. "Qatar's Manufacturing Sector: Bridging the Skills Gap." *PricewaterhouseCoopers (PwC)*. Accessed June 15, 2025. https://www.pwc.com/m1/en/publications/documents/qatars-manufacturing-sector-bridging-the-skills-gap-to-drive-sector-growth.pdf.

69. ———. 2024. "Future-proofing Talent to Deliver Sustainable Growth in the GCC." July 1, 2024. Accessed June 15, 2025. https://www.pwc.com/m1/en/publications/future-proofing-talent-to-deliver-sustainable-growth-in-the-gcc.html.

70. Qatar General Secretariat for Development Planning (GSDP). 2011. "Qatar National Development Strategy 2011~2016: Towards Qatar National Vision 2030." *National Planning Council (NPC)*. Qatar General Secretariat for Development Planning (GSDP). Accessed June 13, 2025. https://www.npc.qa/en/planning/Pages/nds.aspx.

71. Qatar Statistics Authority (QSA). 2005. "Persons Engaged by Sector 2004." 13th Issue. *National Planning Council (NPC)*. Accessed June 13, 2025. https://www.npc.qa/en/statistics/Statistical%20Releases/Social/Labor%20Force/PersonsEngagedWorkers/persons_Engaged_Workers_AnBu_AE_2004.pdf.

72. Qatar University College of Business and Economics (CBE). 2024. "Connecting the Dots: College of Business and Economics Year 2023 - 2024." Academic Year 2023/2024. *CBE NEWS LETTER*. Qatar University College of Business and Economics. Accessed June 24, 2025. https://www.qu.edu.qa/en-us/colleges/business/documents/cbe%20newsletter%202024%20e.pdf.

73. QatarEnergy. 2024. "QatarEnergy Annual Review 2023." *QatarEnergy*. Accessed June 23, 2025. https://www.qatarenergy.qa/en/MediaCenter/Publications/QatarEnergy%20Annual%20Review%202023.pdf.

74. ———. n.d. "What Is Qatarization." Qatarization. Accessed June 23, 2025. https://www.qatarization.com.qa/en/About/Pages/Qatarization.aspx.

75. QatarEnergy LNG. n.d. "QATARIZATION AT QATARGAS." Accessed June 13, 2025. https://www.qatarenergylng.qa/english/JobOpportunities/Pages/Qatarization.

76. Ridoutt, Lee, Chris Selby Smith, Kevin Hummel, and Christina Cheang. 2005. "What Value Do Employers Give to Qualifications?" *National Centre for Vocational Education Research (NCVER)*. NCVER. Accessed June 25, 2025. https://www.ncver.edu.au/research-and-statistics/publications/all-publications/what-value-do-australian-employers-give-to-qualifications.

77. Romanowski, Michael, and Ramzi Nasser. 2012. "Critical Thinking and Qatar's Education for a New Era: Negotiating Possibilities." *International Journal of Critical Pedagogy* 4 (1): 118–34. http://hdl.handle.net/10576/4134.

78. Said, Ziad, and Aws Alhares. 2021. "Addressing Mismatch Between TVET Programs and Skill Needs in the Finance and Banking Sector – a Case Study From Qatar." *International*

Journal of Research in Education and Science (IJRES) 7 (4): 1023–41. https://doi.org/10.46328/ijres.2479.

79. Said, Ziad, Margarita Pavlova, and Leone Wheeler. 2021. *21ST CENTURY SKILLS' CHALLENGES TO POSTSECONDARY TVET INSTITUTIONS IN QATAR*. Conference Paper. *INTED2020 Proceedings*. IATED. https://doi.org/10.21125/inted.2020.1534.

80. Saıd, Ziad. 2021. "Integrating STEM in to TVET Education Programs in QATAR: Issues, Concerns and Prospects." *The Eurasia Proceedings of Educational and Social Sciences* 23 (December): 15–24. https://doi.org/10.55549/epess.1051080.

81. Sarrakh, Redouane, Suresh Renukappa, and Subashini Suresh. 2022. "Evaluation of Challenges for Sustainable Transformation of Qatar Oil and Gas Industry: A Graph Theoretic and Matrix Approach." *Energy Policy* 162 (January). https://doi.org/10.1016/j.enpol.2021.112766.

82. Sellami, Abdellatif, Linda Kimmel, Jill Wittrock, Brian Hunscher, Anna Cotter, Ahmed Al-Emadi, and Darwish Al-Emadi. 2017. "Factors Shaping Qatari Students' Career Expectations in STEM, Business or Public Sector Fields." *Eurasia Journal of Mathematics, Science and Technology Education* 13 (10): 6491–6505. https://doi.org/10.12973/ejmste/77043.

83. Sellami, Abdellatif, Malavika Santhosh, Jolly Bhadra, and Zubair Ahmad. 2023. "High School Students' STEM Interests and Career Aspirations in Qatar: An Exploratory Study." *Heliyon* 9 (3). https://doi.org/10.1016/j.heliyon.2023.e13898.

84. Shin, Dong-Hoon, and David Bills. 2021. "Trends in Educational and Skill Mismatch in the United States." *Social Sciences* 10 (10): 395. https://doi.org/10.3390/socsci10100395.

85. Sobaih, Abu Elnasr. 2023. "Challenges in Effective Implementation of Saudization Policy in the Restaurant Sector." *Sustainability* 15 (9): 7654. https://doi.org/10.3390/su15097654.

86. Stasz, Cathleen, Eric Eide, Francisco Martorell, Louay Constant, Charles Goldman, Joy Moini, Vazha Nadareishvili, and Hanine Salem. 2007a. "Overview of Qatar and the Policy Context." In *Post-Secondary Education in Qatar: Employer Demand, Student Choice, and Options for Policy*, 1st ed, 7–22. RAND Corporation. https://www.jstor.org/stable/10.7249/mg644qatar.10.

87. ———. 2007b. *Post-Secondary Education in Qatar: Employer Demand, Student Choice, and Options for Policy*. 1st ed. RAND Corporation. https://www.jstor.org/stable/10.7249/mg644qatar.

88. State of Qatar. 1962. "Labour Law No. 3 of 1962 (Repealed)." *Official Gazette*, no. Issue 2 (January 1, 1962) (January): 2591. https://almeezan.qa/LawPage.aspx?id=299&language=en.

89. Texas a&M University at Qatar. n.d. "Industry Collaborators." Accessed June 24, 2025. https://www.qatar.tamu.edu/research/industry-collaborators.

90. The Peninsula. 2024. "Qatarization: Great Ambition and Volatile Preparation." May 14, 2024. Accessed June 22, 2025.

https://thepeninsulaqatar.com/opinion/14/05/2024/qatarization-great-ambition-and-volatile-preparation.

91. U.S. Office of Personnel Management (OPM). 2022. "General Schedule Qualification Policies: General Schedule Operating Manual." May 2022. Accessed June 25, 2025. https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-policies/.

92. ———. n.d. "Career Development: Individual Development Plans." Accessed June 25, 2025. https://www.opm.gov/policy-data-oversight/training-and-development/career-development/.

93. Vandeplas, Anneleen, and Anna Thum-Thysen. 2019. "Skills Mismatch and Productivity in the EU." ISSN 2443-8022 (online). *European Commission*. Luxembourg: Publications Office of the European Union. Accessed June 14, 2025. https://doi.org/10.2765/954687.

94. Wazen, Cesar. 2025. "Public Universities and Educational Sustainability in Qatar: A Case Study of Qatar University." In *The Future of Education Policy in the State of Qatar. Gulf Studies*, edited by Esmat Zaidan, Evren Tok, Asmaa Al-Fadala, and Logan Cochrane, 21:325–42. Singapore: Springer. https://doi.org/10.1007/978-981-97-9667-0_17.

95. Wiedmann, Florian, Ashraf Salama, and Alain Thierstein. 2012. "Urban Evolution of the City of Doha : An Investigation Into the Impact of Economic Transformations on Urban Structures." *METU Journal of the Faculty of Architecture* 29 (2): 35–61. https://doi.org/10.4305/metu.jfa.2012.2.2.

96. Winckler, Onn. 2024. "Numbers Increasing, Dependency Decreasing: the GCC Changing Labor Immigration Emphasis." GLMM Explanatory Note No. 1/2024. *Gulf Labour Markets, Migration and Population (GLMM)*. Gulf Labour Markets, Migration and Population Programme (GLMM) of Gulf Research Center (GRC). Accessed June 13, 2025. https://gulfmigration.grc.net/numbers-increasing-dependency-decreasing-the-gcc-changing-labor-immigration-emphasis/.

97. Yasin, Yasin M., Albara Alomari, Shannan MacNevin, Baysan Kmainasi, Mohammad Abdulla, and Sondos Hassanin. 2024. "From Decision to Destination: Factors Influencing Healthcare Students' Career Paths in Qatar." *BMC Medical Education (BMC Med Educ)* 24 (December). https://doi.org/10.1186/s12909-024-06527-3.

98. Yoel, Benjamin. 2018. "Oman's Economic Diversification From Oil and 'Omanization' Policies." Moshe Dayan Center for Middle Eastern and African Studies (MDC). December 24, 2018. Accessed June 13, 2025. https://dayan.org/content/omans-economic-diversification-oil-and-omanization-policies.

99. Younis, Heba, Tamer Elsharnouby, and Said Elbanna. 2023. "Controversial Debates About Workforce Nationalisation: Perspectives From the Qatari Higher Education Industry." *Human Resource Development International* 27 (1): 58–82. https://doi.org/10.1080/13678868.2023.2217734.

100. Zaidan, Esmat, Evren Tok, Asmaa Al-Fadala, and Logan Cochrane. 2025. "Introduction: Future of Education in Qatar." In *The Future of Education Policy in the State*

of Qatar. Gulf Studies, edited by Logan Cochrane, Esmat Zaidan, Evren Tok, and Asmaa Al-Fadala, 21:1–21. Singapore: Springer. https://doi.org/10.1007/978-981-97-9667-0_1.

101. Zeffane, Rachid, and Jamal Shaker Bani Melhem. 2017. "Trust, Job Satisfaction, Perceived Organizational Performance and Turnover Intention: A Public-private Sector Comparison in the United Arab Emirates." *Employee Relations* 39 (7): 1148–67. https://doi.org/10.1108/er-06-2017-0135.