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The Quality of Green and ICT Jobs in Jordan: Evidence from the JLMPS 2025

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THE QUALITY OF GREEN AND ICT JOBS IN JORDAN: EVIDENCE FROM THE JLMPS 2025

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Abstract

As Jordan advances its Economic Modernization Vision (EMV), the expansion of high-value, future-oriented sectors—particularly information and communications technology (ICT) and green industries—has emerged as a central policy priority. The EMV reflects Jordan's commitment to leveraging technological innovation and environmental sustainability to foster inclusive and sustainable growth, with key strategic initiatives including the digitization of government services, promotion of ICT skills among youth, and efforts to create green jobs across sectors such as water, energy, and transport. This paper leverages the 2025 Jordan Labor Market Panel Survey (JLMPS) to explore the characteristics and benefits of both ICT and green employment in the country's labor market. Using descriptive and comparative analyses, it examines the incidence and distribution of these jobs across gender, age, and sectors, alongside their wages, non-wage benefits, and formality status. The paper analyses the skills profiles of workers in these emerging sectors, comparing required versus actual education levels. A comparative analysis explores the differences between ICT and green jobs, with specific attention to overlapping employment that combines characteristics of both sectors. Throughout, the analysis aligns with Jordan's EMV and highlights gender differentials and the implications for female labor force participation in these high-value employment areas.

Keywords: green jobs, ICT employment, digital transition, job quality, educational matching, Jordan, JLMPS
JEL Classifications: J21, J24, J31, O33, Q56

ملخص

مع تقدم الأردن في رؤيته للتحديث الاقتصادي (EMV)، برز توسيع القطاعات عالية القيمة والموجهة نحو المستقبل — وخاصة تكنولوجيا المعلومات والاتصالات (ICT) والصناعات الخضراء— كأولوية سياسية مركزية. ويعكس برنامج EMV التزام الأردن بالاستفادة من الابتكار التكنولوجي والاستدامة البيئية لتعزيز النمو الشامل والمستدام، مع مبادرات استراتيجية رئيسية بما في ذلك رقمنة الخدمات الحكومية، وتعزيز مهارات تكنولوجيا المعلومات والاتصالات بين الشباب، والجهود المبذولة لخلق فرص عمل خضراء عبر قطاعات مثل المياه والطاقة والنقل. تستفيد هذه الورقة من المسح التتبعي لسوق العمل في الأردن لعام 2025 (JLMPS) لاستكشاف خصائص وفوائد كل من تكنولوجيا المعلومات والاتصالات والعمالة الخضراء في سوق العمل في البلاد. وباستخدام التحليلات الوصفية والمقارنة، تدرس الورقة معدل انتشار وتوزيع هذه الوظائف عبر الجنس والعمر والقطاعات، إلى جانب أجورها ومزاياها غير المتعلقة بالأجور وحالتها الشكلية. ويحلل البحث ملامح مهارات العاملين في هذه القطاعات الناشئة، ويقارن مستويات التعليم المطلوبة مقابل مستويات التعليم الفعلية. ويستكشف التحليل المقارن الاختلافات بين تكنولوجيا المعلومات والاتصالات والوظائف الخضراء، مع إيلاء اهتمام خاص لتداخل العمالة الذي يجمع بين خصائص كلا القطاعين. ويتماشى التحليل طوال الوقت مع القيمة الاقتصادية الأوروبية في الأردن ويسلط الضوء على الفوارق بين الجنسين والآثار المترتبة على مشاركة القوى العاملة النسائية في مجالات العمل ذات القيمة العالية هذه.

1. Introduction

The global economy is undergoing two profound transformations: the green transition and the digital transition. Both shifts are reshaping labor markets by creating new opportunities, changing skills demand, and raising important questions about job quality and inclusion. *Green jobs* are commonly defined, following the International Labor Organization (ILO), as "decent jobs that contribute to preserving or restoring the environment" through sustainable production processes, outputs, or conservation activities (ILO, 2016). *ICT jobs* or *digital jobs* are those directly involved in the production of ICT goods and services, as well as jobs across other sectors where intensive ICT skills are applied in day-to-day tasks (Avasant, 2021). Ensuring that Jordan's workforce is adequately prepared for these transformations, through education, training, and alignment of skills supply with emerging labor market demand, is not only a pressing policy priority but also a prerequisite for achieving the goals of Jordan's Economic Modernization Vision, which identifies green and digital jobs as the backbone of "future employment" and as central to tackling unemployment and generating sustainable job opportunities (ILO, 2023).

This paper examines the incidence and characteristics of green and ICT jobs in Jordan using the newly released 2025 Jordan Labor Market Panel Survey (JLMPS). Our primary analytical contribution is to assess the *quality and nature* of these jobs: their wages, non-wage benefits, formality status, and skills requirements. Unlike studies that focus on projecting the scale of job creation in these sectors, this paper provides the first systematic profile of green and ICT employment in Jordan, drawing on new survey modules introduced in the 2025 round that allow direct identification of workers engaged in environmental activities and ICT-intensive tasks.

While the detailed green and ICT job modules are only available in 2025, we also examine broad employment trends over time by leveraging the stability of occupational characteristics.

This focus responds directly to the Economic Modernization Vision (EMV 2023–2033), which positions ICT and green industries at the heart of Jordan's growth strategy (Government of Jordan, 2022; Ministry of Environment, 2017). The EMV sets an ambitious target of creating one million jobs by 2033, with future-oriented sectors such as digital services, renewable energy, sustainable transport, and water efficiency identified as engines of employment and productivity growth (Government of Jordan, 2022; GIZ, 2023).

1.1. Green and ICT jobs in Jordan's policy context

Jordan has committed itself to a low-carbon and resource-efficient growth path, as reflected in the National Green Growth Plan (2017) and subsequent Green Growth Action Plans (2021–2025) (Ministry of Environment, 2017). These documents, along with EMV, highlight priority sectors, including energy, transport, water, agriculture, manufacturing, and tourism, where green

investment can yield substantial employment gains. The first national green jobs assessment estimated that between 75,000 and 95,000 jobs in Jordan already qualify as green, representing up to 30% of employment in selected sectors such as agriculture and transport (GIZ, 2023). The assessment also stressed the potential for job-rich growth if investments are directed toward recycling, renewable energy, water efficiency, and sustainable public transport.

Parallel to the green transition, Jordan's ICT sector has been one of the most dynamic in the region. ICT contributed roughly 4% of GDP in 2020, with over 24,000 employees across more than 1,000 firms, the majority of which are small and medium enterprises (Avasant, 2021). Jordan's strategy to become a regional digital hub—anchored by the Ministry of Digital Economy and Entrepreneurship (MoDEE) through initiatives such as the Youth, Technology, and Jobs (YTJ) project—emphasises skills development, digital entrepreneurship, and expansion of ICT exports (World Bank, 2022). Recent analyses note both strong potential and persistent challenges: while Jordan boasts a young, highly educated population, graduate employability in ICT remains limited, with only 42% of ICT graduates employed in the sector, and women—despite high enrolment rates—making up just 25% of the ICT workforce (Avasant, 2021; ILO, 2023).

1.2. Analytical contribution

This paper brings together, for the first time in Jordan, the analysis of green jobs and ICT jobs within a single framework. While the Egyptian Labor Market Panel Survey (ELMPS) produced separate papers on green jobs and ICT jobs (Abou-Ali & Amer, 2024), Jordan's EMV views both transitions as intertwined drivers of "future jobs." Our approach therefore mirrors the ELMPS methodology but integrates both definitions to reflect Jordan's policy priorities.

For green jobs, we adopt the ILO framework operationalized in the JLMPS 2025: jobs are classified as green if they either (i) produce environmental outputs (e.g. renewable energy, recycling, water-saving technologies), or (ii) involve environmentally sustainable processes within existing sectors (ILO, 2016; GIZ, 2023). For ICT jobs, we use a dual approach: identifying employment in ICT occupations (based on ISCO codes) and capturing intensive ICT skill use based on job-required ICT tasks (Avasant, 2021; ILO, 2023). This allows us to capture both direct ICT-related occupations and the growing set of roles in which digital skills are increasingly essential.

While the detailed green and ICT job modules are only available in 2025, we extend the analysis to earlier survey waves by leveraging the relative stability of occupational characteristics. Using the 2025 data, we calculate the share of green and ICT employment within each four-digit ISCO occupation code and classify occupations into intensity groups: no, low, moderate, and high involvement. Applying this classification to the 2010 and 2016 JLMPS waves allows us to track

shifts in occupational composition over fifteen years. This approach provides indicative evidence on employment trends while acknowledging that it captures occupational structure rather than the direct measurement of green and ICT activities available only in 2025.

1.3. Structure of the paper

The paper proceeds as follows. Section 2 details the data and classification methodology. Section 3 profiles the characteristics of green jobs in Jordan, while Section 4 does the same for ICT jobs. Section 5 presents a comparative analysis, highlighting similarities, differences, and overlaps between the two categories. Section 6 concludes with key policy implications, focusing on education and training priorities, targeted incentives for firms, and measures to enhance women's and youth's inclusion in future-oriented sectors.

Consistent with other JLMPS working papers, the analysis first presents the overall scale of green and ICT employment for both Jordanian and non-Jordanian workers (Figures 1 and 15 only), before focusing exclusively on Jordanian workers for all subsequent detailed analysis of job characteristics, wages, benefits, and educational matching.

By situating the analysis within the EMV and Jordan's green growth agenda, the paper aims to provide evidence to policymakers on not only *how many* jobs fall into these categories, but also *what kinds* of jobs they are, and what this implies for preparing Jordan's workforce for the future economy.

2. Data and methodology

2.1. Data

This analysis draws on all three rounds of the Jordan Labor Market Panel Survey (JLMPS): 2010, 2016, and 2025 (OAMDI, 2018b; 2018a; 2026). The JLMPS is a comprehensive longitudinal study of Jordan's labor market forming part of the broader Labor Market Panel Surveys (LMPS) initiative coordinated by the Economic Research Forum (Krafft & Assaad, 2021; Krafft, Assaad & Ragab, 2026).

The JLMPS collects detailed information on employment status, job characteristics, skills requirements, wages, and working conditions for working-age individuals (15-64 years), alongside demographic and socioeconomic data for all household members. The survey design enables analysis of labor market patterns, transitions, and outcomes at both individual and household levels.

The JLMPS 2025 captures detailed information about employment patterns, skills utilisation, and labor market transitions in Jordan. This version of the survey includes new questions on the green components of jobs and ICT skills utilization, enabling analysis of employment characteristics specific to these emerging industries.

2.2. Green jobs methodology

Green jobs are commonly defined as employment that contributes to preserving or restoring environmental quality whilst providing decent work opportunities. This analysis adopts the International Labor Organization's framework, which defines green jobs as those that contribute to environmental sustainability through either the production of environmental goods and services or the adoption of environmentally sustainable processes.

Following the methodology established in the Egyptian Labor Market Panel Survey and consistent with ILO guidelines, this analysis employs a dual approach to green job identification. Output-based green jobs encompass employment in economic units that produce environmental goods and services, including renewable energy technologies, water treatment systems, waste management services, and environmental monitoring equipment. Process-based green jobs include employment where workers utilize environmentally sustainable practices to improve the environmental performance of their economic unit, irrespective of the unit's primary output.

This dual classification system recognizes that green employment can occur across all sectors of the economy. A manufacturing firm producing conventional goods may employ workers in green process roles, whilst workers in a renewable energy company contribute to green outputs regardless of their specific role. The framework acknowledges that some jobs may contribute to both environmental outputs and processes, representing the intersection of these categories.

The JLMPS 2025 operationalizes green job identification through questions administered to employed individuals about their work activities and workplace environmental practices. The survey asks respondents whether their work involves specific environmental activities, including energy efficiency improvements, waste reduction, environmental restoration, renewable energy, and sustainable resource management. This is used as the basis for our definition of green jobs.

To examine trends in green employment over time, we leverage the fact that the green content of occupations is likely to remain relatively stable across survey waves. Using the 2025 data, we calculate the proportion of workers in each four-digit ISCO occupation who are engaged in green activities, yielding an occupation-level green penetration rate. Occupations are then classified into four intensity categories based on these penetration rates: No Green (zero percent), Low Green (greater than zero but less than ten percent), Moderate Green (ten to less than twenty percent), and

High Green (twenty percent or above). These thresholds are set to produce meaningful variation across categories given the observed distribution of penetration rates. By applying these 2025-derived classifications to the 2010 and 2016 survey waves, we can track how employment has shifted across occupations with different levels of green intensity, providing insight into the changing structure of green employment in Jordan's labor market.

2.3. ICT methodology

ICT jobs are defined through two complementary approaches that capture different aspects of the relationship between employment and information and communications technology. This analysis follows established international methodologies whilst also testing alternative measurement approaches using Jordan-specific survey data.

Following the International Labor Organization's digital employment diagnostics guidelines (ILO, 2023a), we adopt the OECD's established classification system that distinguishes ICT Specialist occupations and ICT Task-Intensive occupations based on International Standard Classification of Occupations (ISCO) codes. This classification, developed through the OECD Going Digital Toolkit and validated across multiple countries, provides international comparability for our analysis.

ICT Specialist occupations comprise roles where ICT knowledge constitutes the primary job content, including software developers (ISCO 251), database professionals (ISCO 252), ICT managers (ISCO 133), and telecommunications technicians (ISCO 352). ICT Task-Intensive occupations encompass roles across various sectors where ICT skills are essential for job performance, including business managers (ISCO 121), finance professionals (ISCO 241), and administration professionals (ISCO 242) (ILO, 2023a, Annex A3).

Given the substantial variation in ICT task performance within occupational categories (as demonstrated in Figure 14), the primary analysis employs the **union of these two definitions**. Workers are classified as ICT if they meet either the occupational criteria or the task-based criteria (three or more ICT tasks). This approach ensures maximum coverage of ICT roles whilst capturing both formally designated ICT positions and roles where intensive digital work occurs regardless of formal classification. The individualized occupational-only and task-based-only results are presented in the annex for comparison.

A more detailed discussion of the classifications of ICT jobs and the rationale for the union approach follows in Section 4.

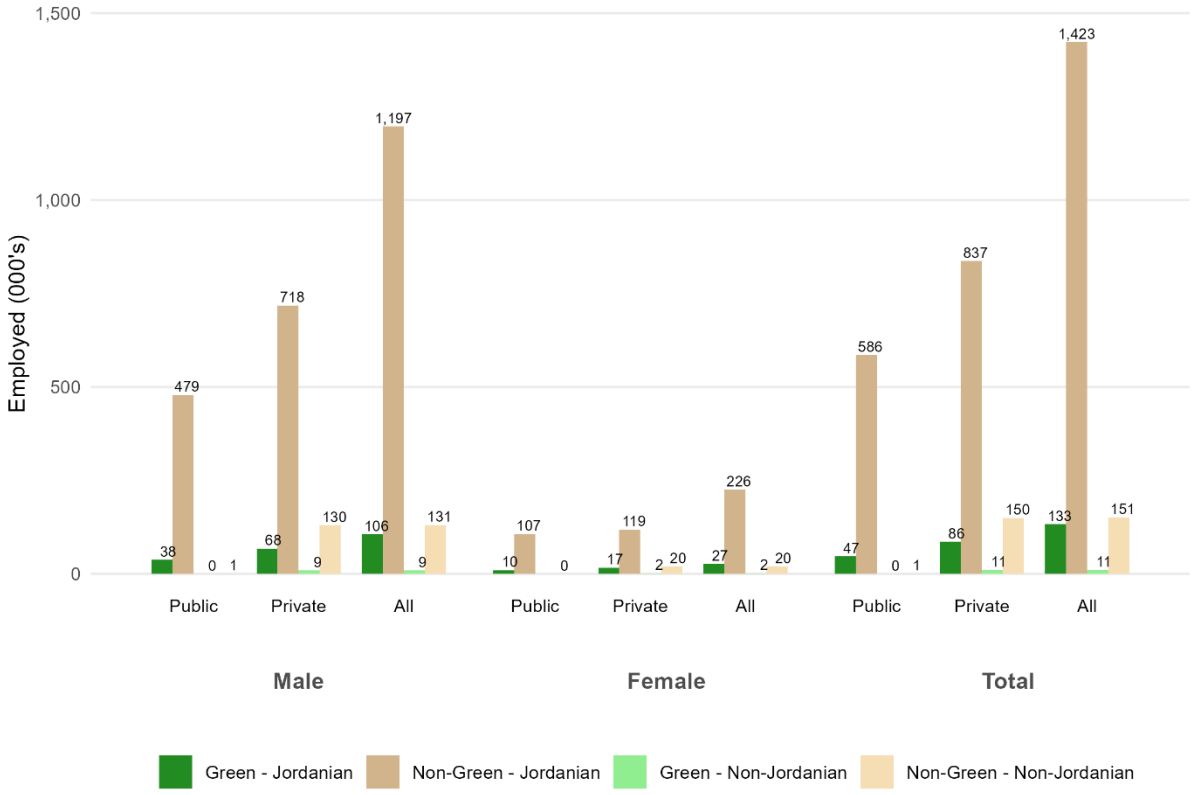
To examine trends in ICT employment over time, we adopt a similar approach to the green jobs time series analysis. Using the 2025 data and the union definition of ICT employment, we calculate the proportion of workers in each four-digit ISCO occupation who are engaged in ICT activities, yielding an occupation-level ICT penetration rate. Occupations are then classified into four intensity categories: No ICT (zero percent), Low ICT (greater than zero but less than twenty percent), Moderate ICT (twenty to less than forty percent), and High ICT (forty percent or above). These thresholds are set to produce meaningful variation across categories given the observed distribution of penetration rates. By applying these 2025-derived classifications to the 2010 and 2016 survey waves, we can track structural shifts in employment toward ICT-intensive occupations over the fifteen-year period.

3. Green jobs

This section examines the characteristics and distribution of green employment in Jordan. It first covers the share and incidence of these jobs by sector, gender, and nationality, including their distribution across industries, broad occupational categories, and the specific green activities undertaken. The analysis begins by presenting overall employment patterns for both Jordanian and non-Jordanian workers (Figure 1 only), then focuses exclusively on Jordanian workers for all subsequent analysis of green job characteristics, wages, benefits, and educational matching. It then examines the wages, benefits, and educational requirements of these jobs compared to non-green employment.

3.1. Green jobs share and incidence

Figure 1. Number employed in green and non-green activities (in thousands) by institutional sector, gender, and nationality, ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

Figure 1 shows the number of people employed in green and non-green activities in Jordan, split by institutional sector, gender, and nationality. This is the only figure in this section that includes non-Jordanian workers; all subsequent figures present Jordanian workers only. The absolute distribution of employment reveals the scale and concentration of green jobs across Jordan's labor market, highlighting both the potential and limitations of current green employment.

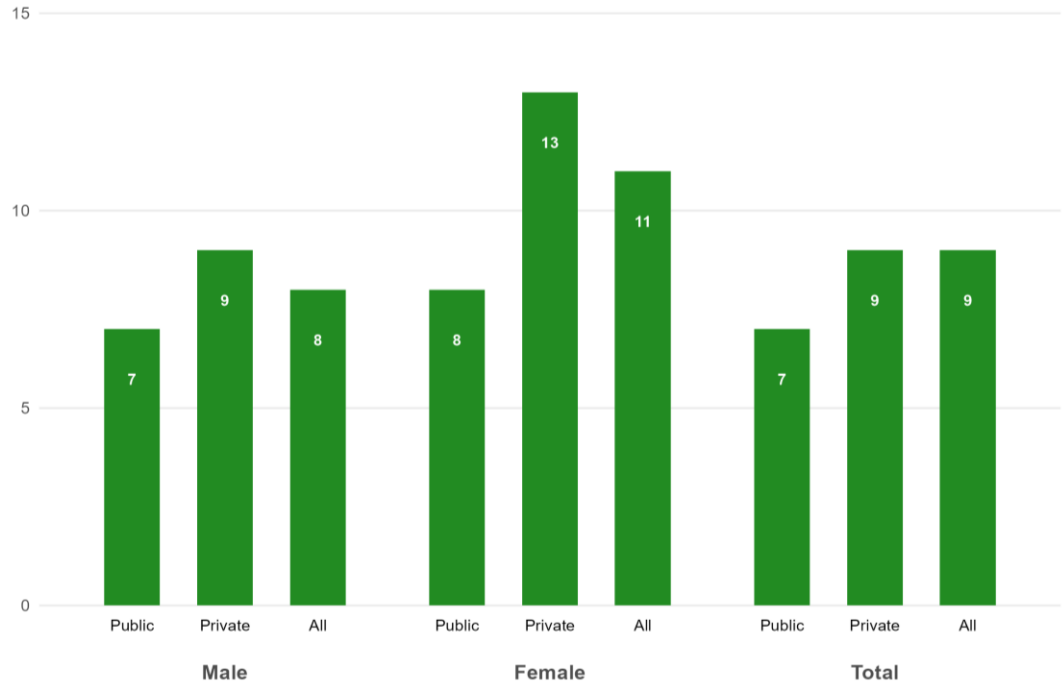
Green jobs among Jordanian workers total 133,000, with a pronounced gender imbalance that mirrors broader labor market participation patterns. Male Jordanian workers dominate green employment in absolute terms, accounting for 106,000 of total green jobs compared to 27,000 female green workers. This approximately 4:1 ratio reflects the significantly higher overall male

labor force participation rather than differential access to green opportunities per se. Non-Jordanian green employment is minimal at 11,000 workers total, concentrated primarily among male workers.

Within the Jordanian workforce, green employment shows sectoral concentration with 86,000 workers in the private sector and 47,000 in the public sector. This approximately 2:1 ratio of private sector to public sector green employment is consistent across both genders. Male workers show 68,000 in the private sector versus 38,000 in the public sector, whilst female workers show 17,000 in the private sector versus 10,000 in the public sector, maintaining similar proportional distributions.

Figure 2 shows the share of green employment among Jordanian workers only, revealing distinct patterns across sectors and gender. Overall, 9 percent of Jordanian workers are engaged in green activities. Female Jordanian workers demonstrate substantially higher rates of green employment in the private sector at 13 percent compared to 9 percent for male workers. Public sector green employment shows 8 percent for female Jordanian workers and 7 percent for male workers. Overall, female Jordanian workers show 11 percent green employment compared to 8 percent for male workers, indicating higher green job participation among women in the domestic workforce.

Figure 2. Share of green employment (in percentage) by institutional sector and gender, ages 15-64, 2025



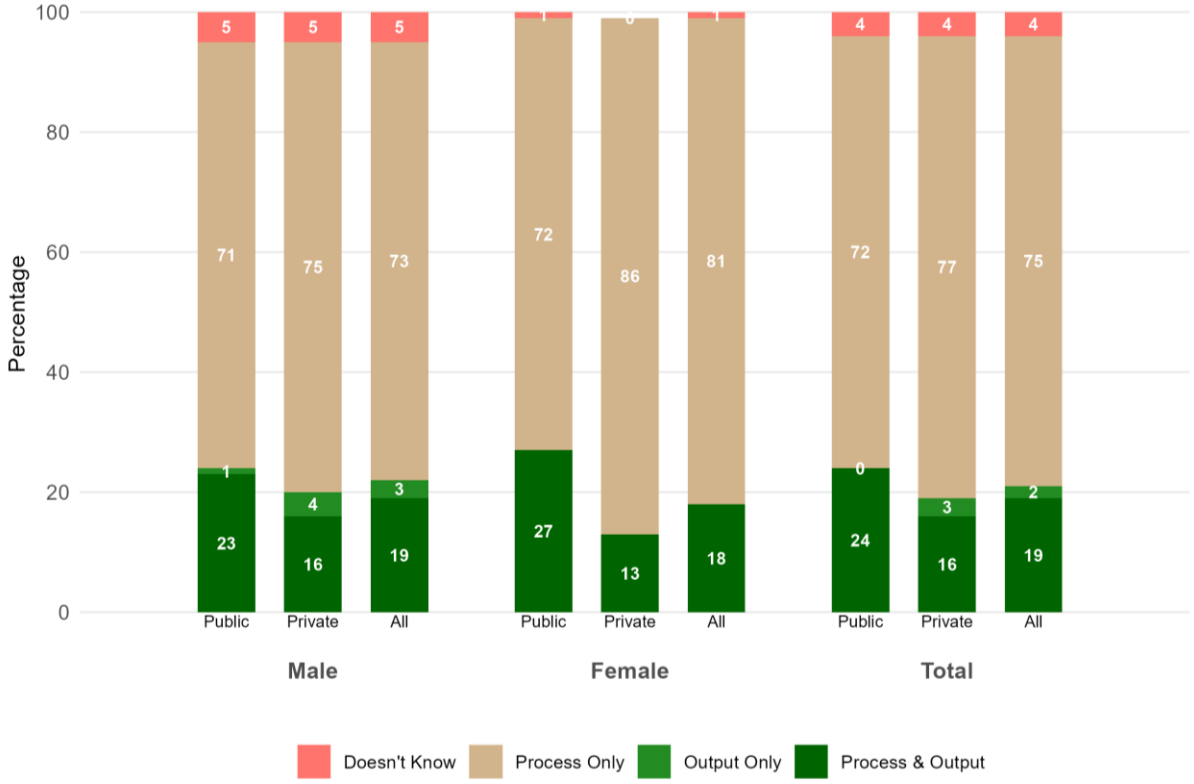
Source: Authors calculations based on JLMPS 2025

Distribution of green tasks

Figures 3 and 4 together provide a comprehensive picture of how green employment is structured in Jordan, revealing both the operational focus and specific environmental tasks that characterize green jobs across different sectors and gender categories.

Green employment in Jordan is predominantly process oriented. Figure 3 demonstrates that process-only activities dominate across all sectors, comprising 71-86 percent of green jobs depending on sector and gender. Combined process and output activities represent 13-27 percent of green employment, whilst output only activities account for a small share. The high concentration in process-only activities indicates that most green workers are engaged in improving environmental performance within existing operations rather than producing dedicated environmental goods and services.

Figure 3. Distribution of green activities by environmental focus (in percentage), institutional sector and gender, ages 15-64, 2025



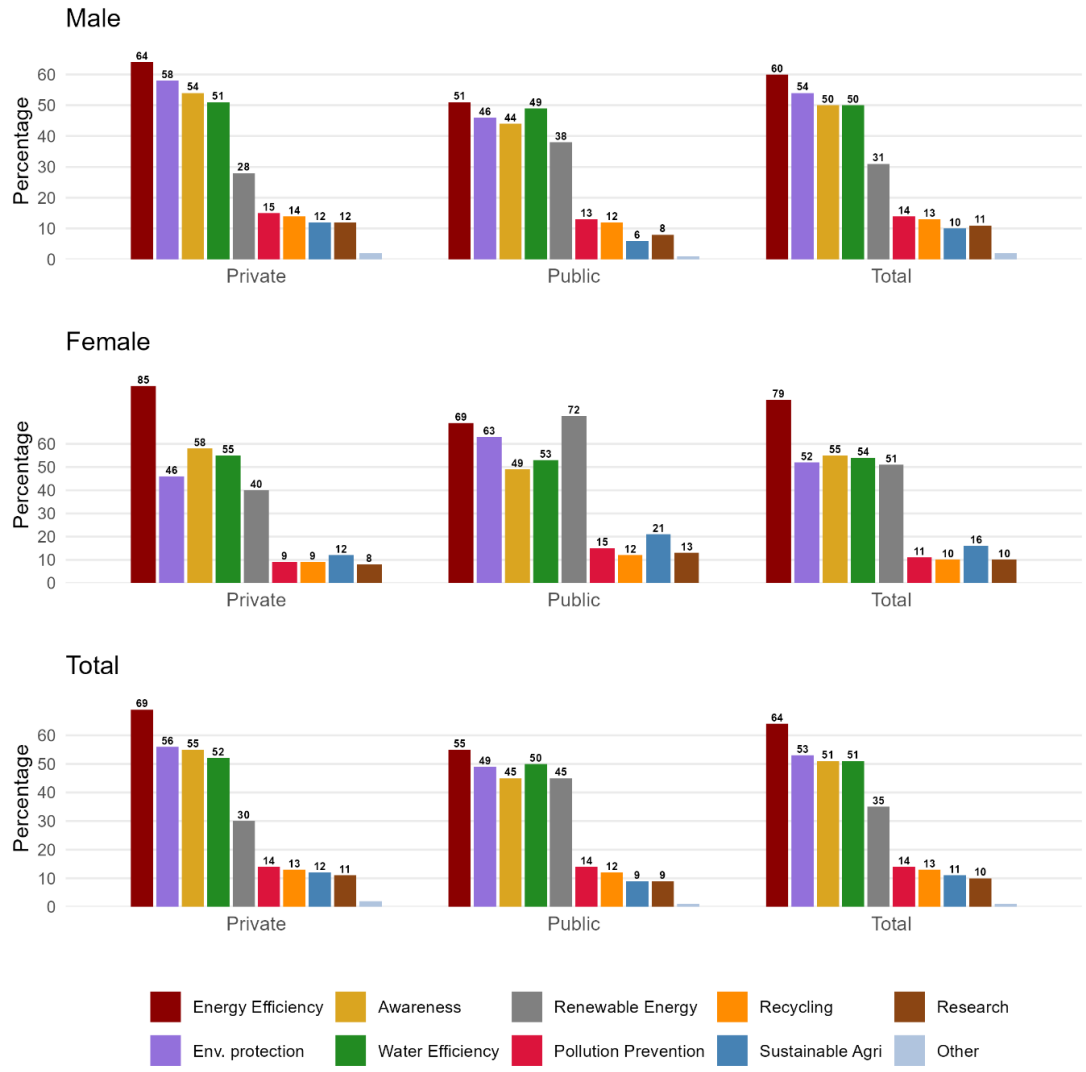
Source: Authors calculations based on JLMPS 2025

Sectoral patterns show distinct specializations in environmental tasks. Figure 4 demonstrates that energy efficiency dominates green employment across all sectors, particularly in the private sector

where 64 percent of male workers and 85 percent of female workers engage in energy efficiency activities. Public sector green employment shows lower energy efficiency engagement (51 percent for males, 69 percent for females) but substantially higher renewable energy involvement, with 72 percent of female public sector workers and 38 percent of male public sector workers engaged in renewable energy activities compared to 40 percent and 28 percent respectively in the private sector.

Environmental protection and awareness represent another major category, with approximately half of green workers engaged in these activities across sectors. Water efficiency shows similar levels of engagement (49-55 percent across sectors and genders). Other categories including pollution prevention, recycling, sustainable agriculture, and research show lower engagement levels, generally ranging from 8-15 percent.

Figure 4. Distribution of green activities by environmental task category (in percentage), institutional sector and gender, ages 15-64, 2025

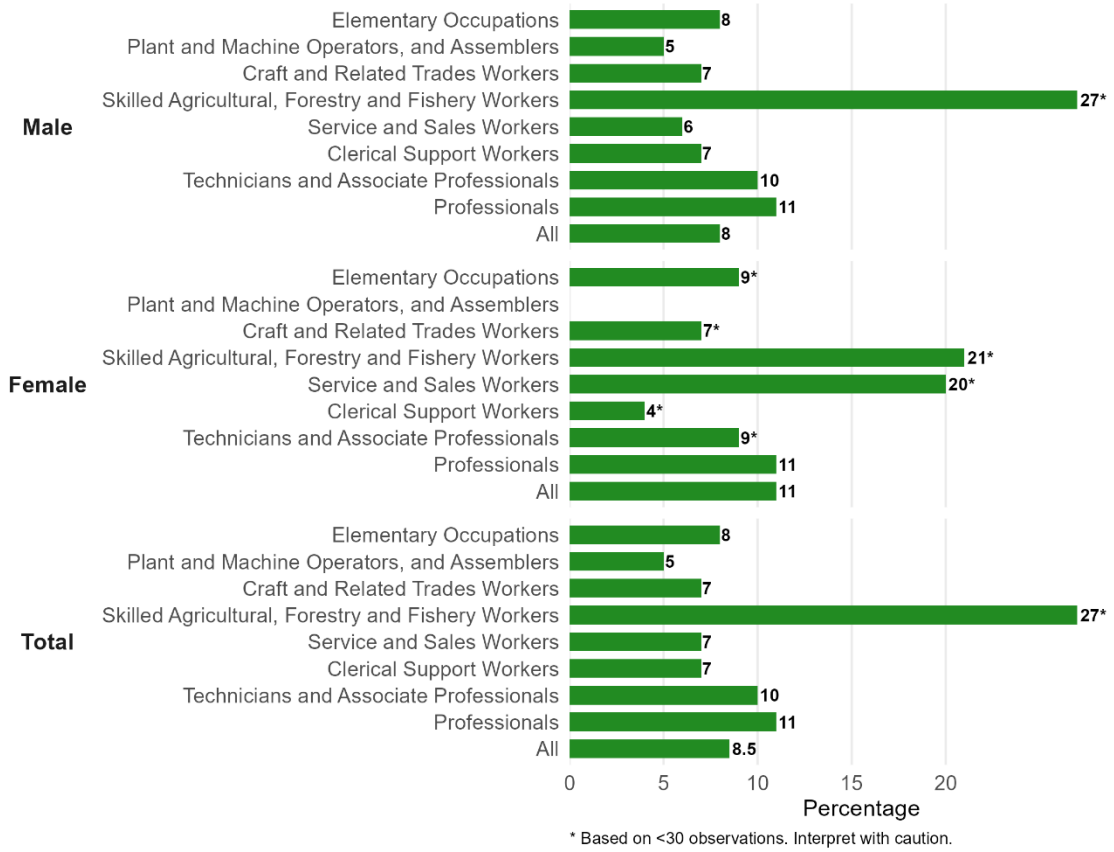


Source: Authors calculations based on JLMPS 2025

Occupation and economic sector distribution

Figure 5 shows the distribution of green employment across occupational categories by gender, revealing distinct patterns of green job concentration and notable gender differences in occupational pathways into environmental work.

Figure 5. Share of green employment by occupation (in percentage) by gender, ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

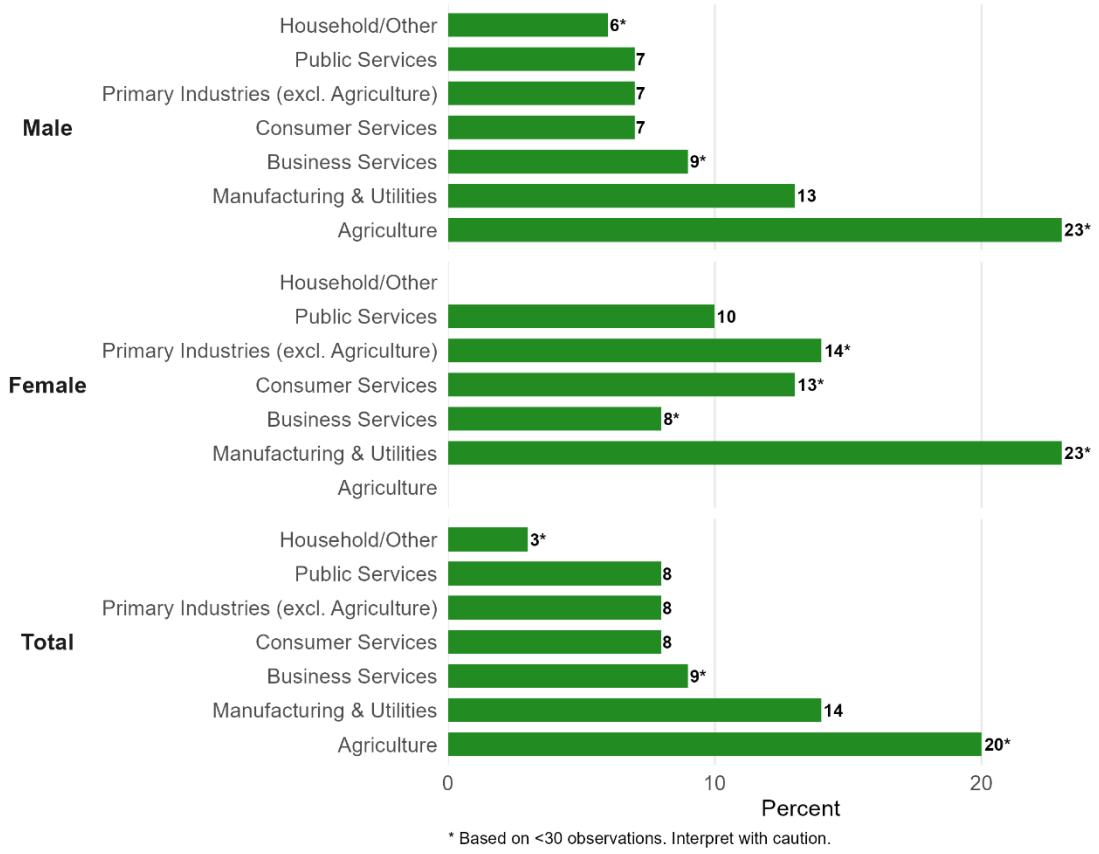
Skilled agricultural, forestry and fishery workers demonstrate the highest green employment intensity across all categories, with 27 percent of male workers and 21 percent of female workers in this occupation engaged in green activities. This concentration reflects the direct environmental dimensions of agricultural and natural resource work, where sustainability practices, organic farming, and resource conservation are increasingly integrated into traditional occupational roles.

Female workers show notably higher green employment rates in service and sales occupations (20 percent) compared to male workers (6 percent), representing one of the most pronounced gender differences across occupational categories. Professionals show relatively balanced green participation across genders, with 11 percent for both male and female workers. Technicians and associate professionals demonstrate 10 percent green employment for males and 9 percent for females. Elementary occupations show 8 percent green employment for males and 9 percent for females. Overall, green employment across all occupations stands at 8.5 percent, with male

workers at 8 percent and female workers at 11 percent, indicating slightly higher overall green employment participation among women.

Figure 6 shows green employment shares across economic sectors, with sectors aggregated at higher levels due to sample size constraints. The data reveals agriculture as the dominant source of green employment, alongside important concentrations in manufacturing and utilities.

Figure 6. Share of green employment by economic sector (in percentage) by gender, ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

Agriculture dominates green employment with 20 percent of all agricultural workers engaged in green activities, rising to 23 percent for male agricultural workers. Female agricultural green employment is not shown due to sample size limitations. This concentration confirms agriculture's central role in Jordan's green economy.

Manufacturing and utilities show the second-highest green employment penetration at 14 percent overall, with 13 percent for male workers and 23 percent for female workers. The manufacturing

and utilities sector's relatively higher level of green employment suggests growing integration of environmental practices in industrial production and utility operations. Business services demonstrate 9 percent overall green employment, with male workers at 9 percent and female workers at 8 percent. Primary industries excluding agriculture, consumer services, and public services all show approximately 7-8 percent green employment shares across gender categories, indicating relatively balanced green job penetration across these sectors.

Trends in green employment over time

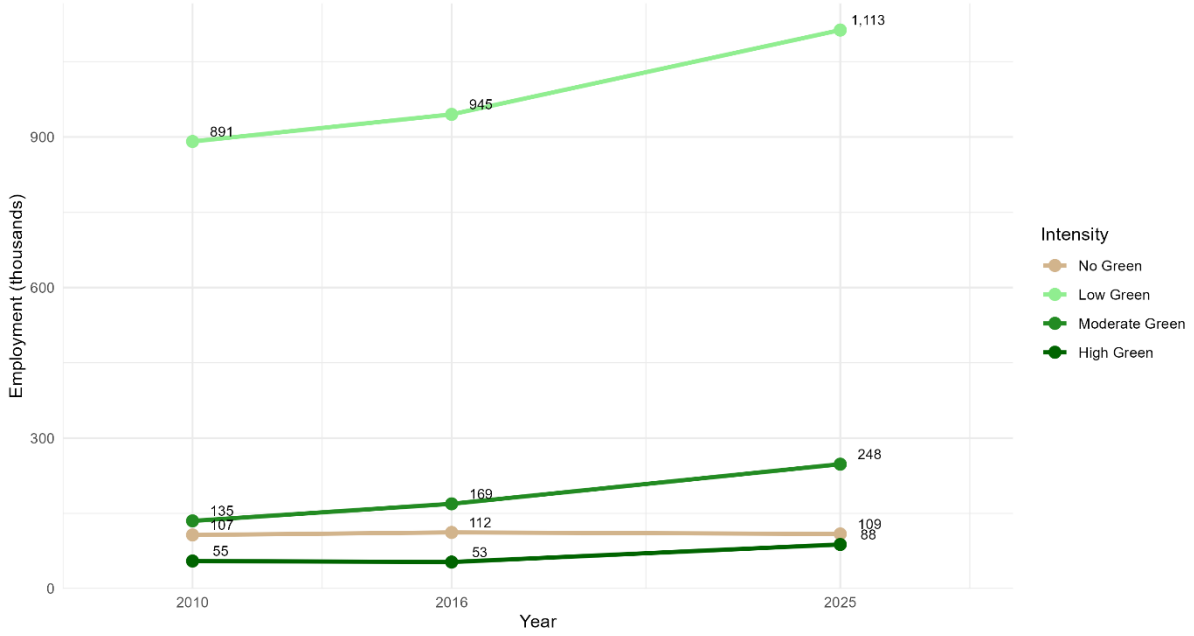
Figures 7 and 8 show employment trends across occupations classified by their green intensity, based on 2025 penetration rates applied retroactively to the 2010 and 2016 survey waves. The analysis reveals that the vast majority of Jordanian employment occurs in occupations with at least some green activity, with only 7-9 percent of workers in occupations with zero green penetration across all three survey years.

Employment growth has occurred across all green intensity categories, with particularly notable shifts toward higher-intensity occupations. The share of workers in Moderate Green occupations (10-20 percent penetration) increased from 11 percent in 2010 to 16 percent in 2025, whilst High Green occupations (20 percent or above) grew modestly from 5 to 6 percent. Correspondingly, Low Green occupations (greater than zero but less than 10 percent) declined from 75 to 71 percent. This pattern suggests a gradual intensification of green activities within Jordan's occupational structure rather than rapid transformation.

In absolute terms, employment in Moderate Green occupations grew from 135,000 to 248,000 workers over the fifteen-year period, whilst High Green occupations expanded from 55,000 to 88,000 workers. Low Green occupations, despite their declining share, still grew substantially in absolute terms from 891,000 to 1,113,000 workers, reflecting overall employment expansion. Employment in occupations with no green activity remained relatively stable, growing modestly from 107,000 to 109,000 workers.

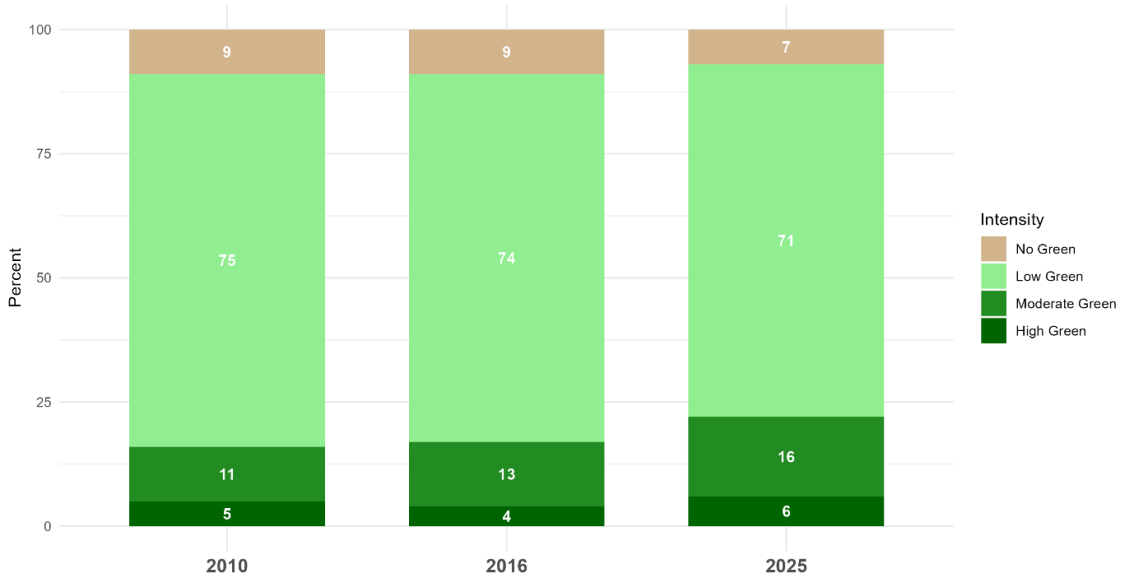
The stability of the No Green category at 7-9 percent throughout the period indicates that the greening of employment is occurring through intensification within existing occupational categories rather than elimination of non-green occupations. This suggests that environmental practices are being progressively integrated across the labor market, with workers in traditionally non-environmental roles increasingly engaging in green activities as part of their employment.

Figure 7. Employment by green occupation intensity (in thousands), ages 15-64, 2010-2025



Source: Authors calculations based on JLMPS 2010, 2016, 2025

Figure 8. Employment share by green occupation intensity (in percentage), ages 15-64, 2010-2025



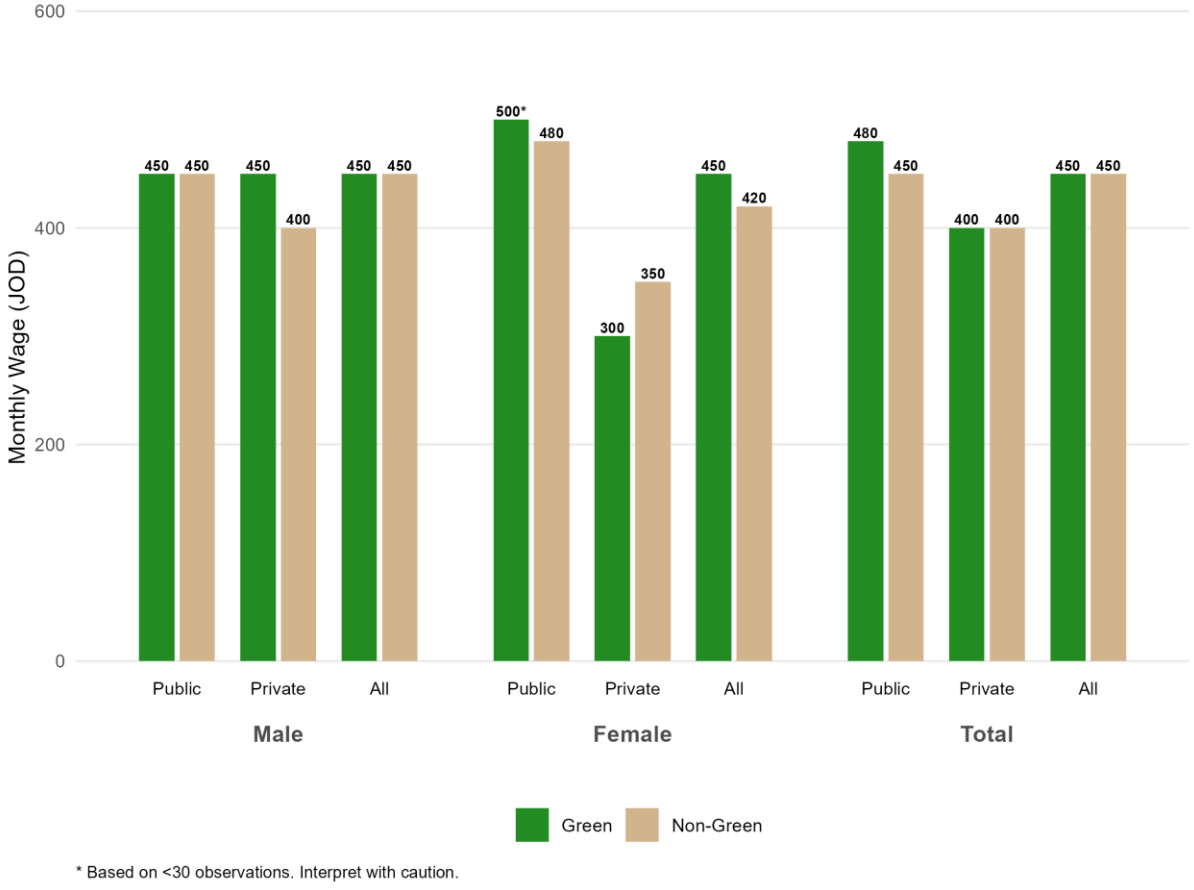
Source: Authors calculations based on JLMPS 2010, 2016, 2025

3.2. Wages

Figure 9 shows median monthly wages for green and non-green workers across institutional sectors and gender categories, revealing distinctive wage patterns that vary significantly by sector and gender. Overall, green workers earn median monthly wages of 450 JOD, equivalent to non-green workers at the aggregate level.

Male workers in green jobs earn wages equivalent to their non-green counterparts in both sectors. In the public sector, both green and non-green male workers earn 450 JOD monthly. In the private sector, male green workers earn 450 JOD compared to 400 JOD for non-green workers, showing a modest premium. Overall, male green workers earn 450 JOD monthly, matching non-green male workers. This wage parity suggests that green jobs for men provide comparable compensation to traditional employment in both the public and private sector.

Figure 9. Median monthly wages (JOD) by green job status, institutional sector and gender, ages 15-64, 2025



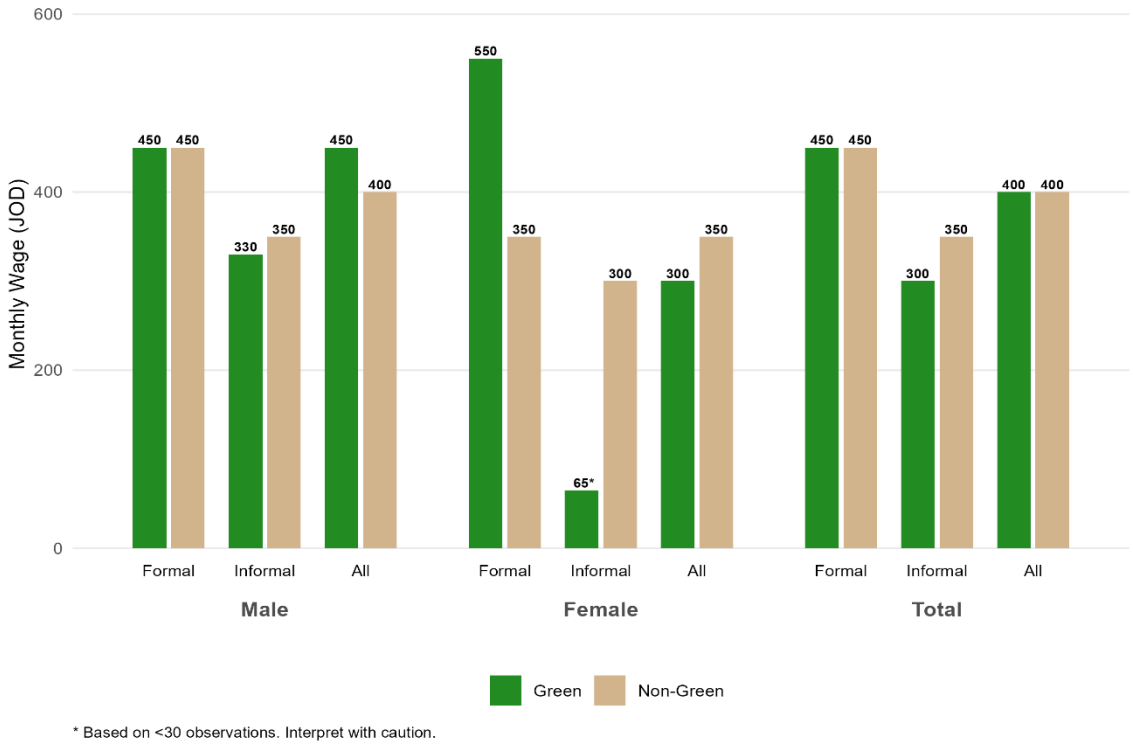
Source: Authors calculations based on JLMPS 2025

Female workers demonstrate substantial variation by sector. In the public sector, female green workers earn 500 JOD compared to 480 JOD for non-green workers, showing a modest premium. However, female private sector green workers face a substantial wage penalty, earning only 300 JOD monthly compared to 350 JOD for non-green private sector female workers. Overall, female green workers earn 450 JOD compared to 420 JOD for non-green workers, with this aggregate figure masking the significant sectoral variation.

Figure 10 shows median monthly wages by employment formality status in the private sector, revealing substantial differences between formal and informal employment. Overall, private sector green workers earn median wages of 330 JOD compared to 350 JOD for non-green workers.

Male workers demonstrate clear wage premiums in formal employment, with green formal workers earning 450 JOD monthly compared to 330 JOD for green informal workers. Non-green male workers earn 450 JOD in formal employment versus 350 JOD in informal employment. Within formal employment, male green and non-green workers earn equivalent wages, whilst in informal employment, green workers face a modest wage penalty.

Figure 10. Median monthly wages (JOD) by green job status, employment formality (private sector only) and gender, ages 15-64, 2025



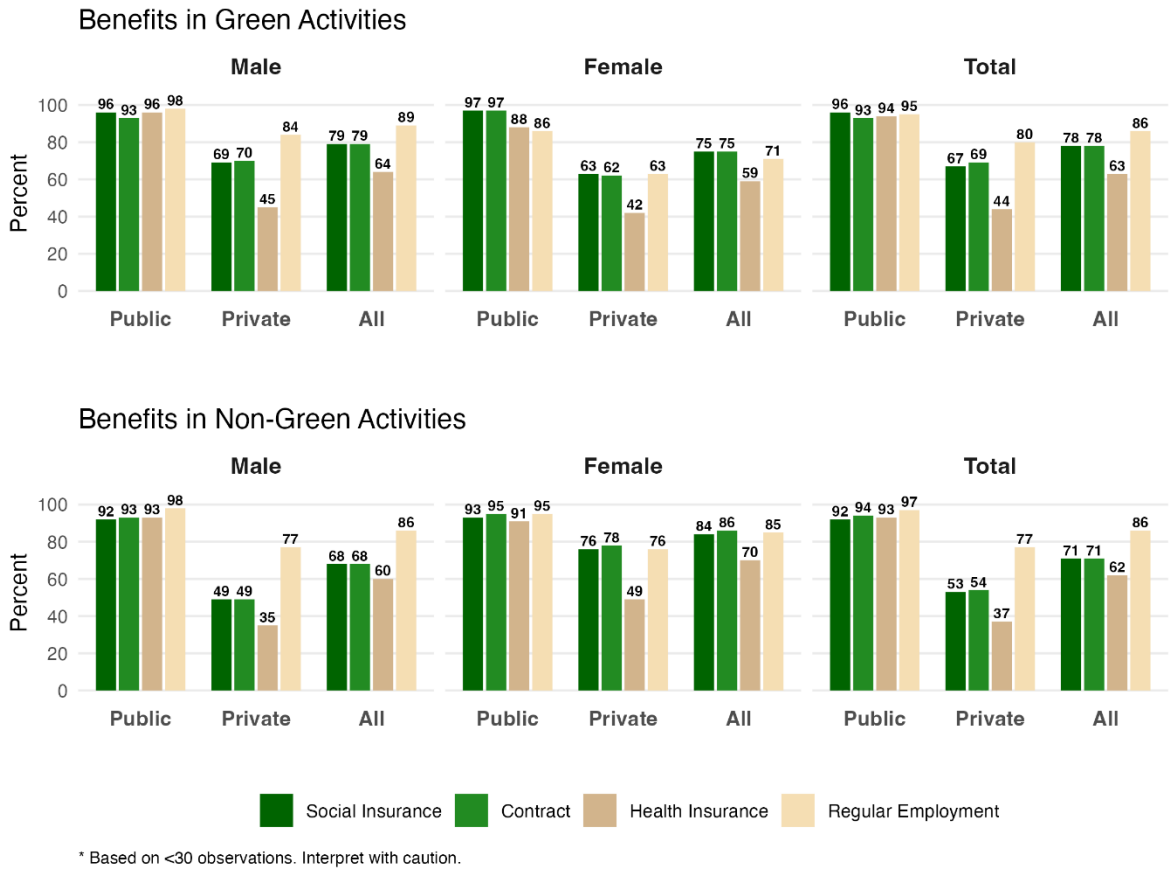
Source: Authors calculations based on JLMPS 2025

Female wage patterns show substantial variation by formality status. In formal employment, female green workers earn 550 JOD compared to 300 JOD for non-green workers, representing a significant premium. However, in informal employment, female green workers earn only 65 JOD compared to 300 JOD for non-green workers. Overall, female green workers in the private sector earn 300 JOD compared to 350 JOD for non-green workers. The exceptionally low wage for informal female green workers (65 JOD) is based on a limited number of observations (10), however it does suggest that green employment in the private sector is bimodally distributed between high wage formal work and low wage informal work.

3.3. Benefits

Figure 11 shows access to employment benefits across green and non-green jobs by institutional sector and gender. The data reveals substantial variation in benefit provision between sectors, with generally similar patterns between green and non-green employment within each sector.

Figure 11. Benefits by green job status, institutional sector and gender, ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

Public sector workers enjoy the highest levels of benefit coverage across all categories, with over 85 percent receiving social insurance, contracts, and health insurance regardless of green job status. Both male and female public sector workers show virtually identical benefit rates between green and non-green employment, with coverage exceeding 90 percent across most benefit categories.

Private sector employment shows markedly lower benefit provision across both green and non-green jobs. Male private sector workers in green jobs receive modestly higher social insurance and contract coverage compared to non-green workers, though both groups show substantially lower benefit provision than the public sector. Female private sector workers demonstrate more varied patterns, with green jobs showing lower benefit coverage than non-green jobs across most categories. Overall, private sector benefit provision remains substantially below public sector levels for both green and non-green employment, with variation by gender within the private sector.

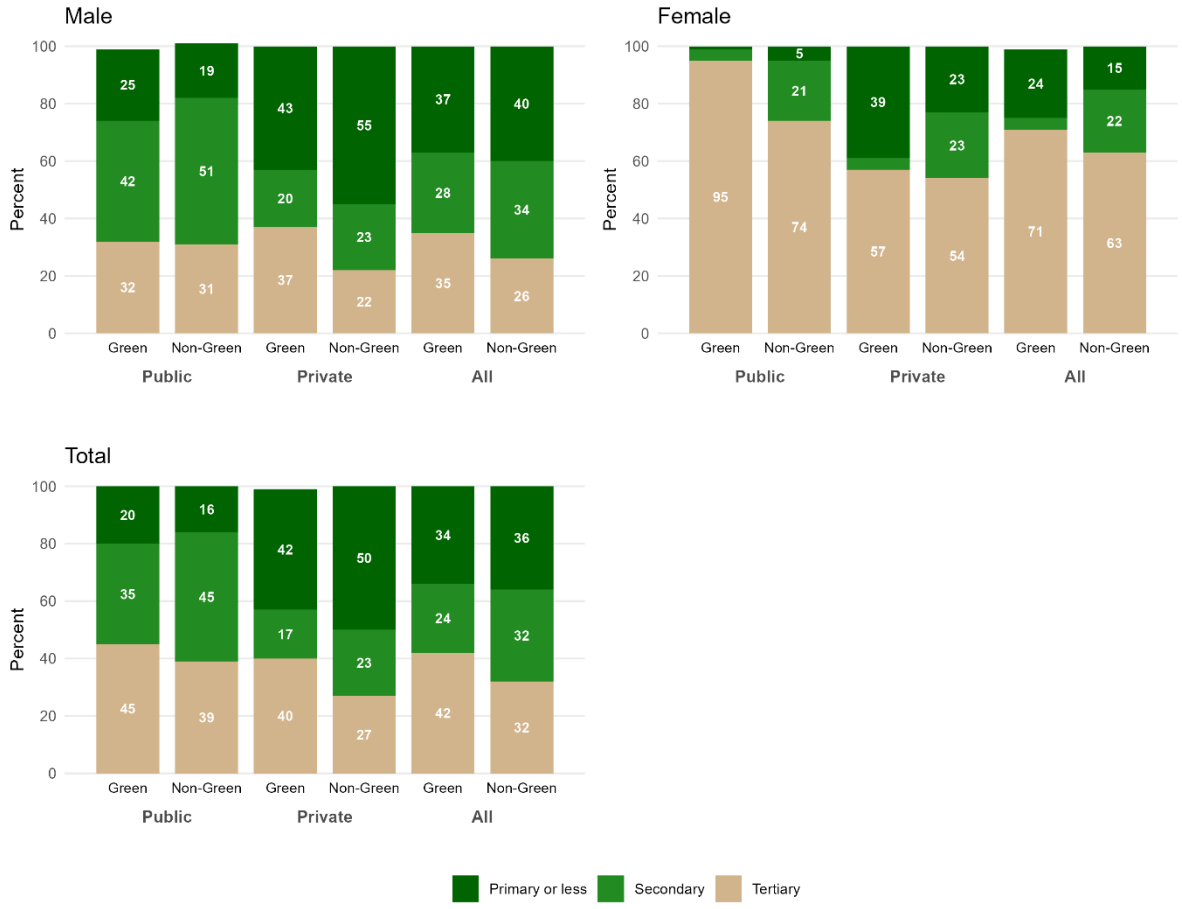
3.4. Education

Figures 12 and 13 together reveal how educational requirements set by employers and educational matching differ between green and non-green employment across sectors and gender. The patterns demonstrate distinct hiring practices and qualification standards for green versus traditional employment.

Figure 12 shows that public sector employers have higher educational requirements for positions in both green and non-green jobs than the private sector, with particularly high requirements for female positions. Private sector green employment demonstrates markedly different patterns, with employers setting substantially lower educational requirements overall than the public sector. However, private sector green jobs require higher educational qualifications than non-green jobs.

Figure 13 reveals varied educational matching patterns across sectors and gender. Female public sector workers demonstrate strong educational matching in green jobs, with 87 percent possessing appropriate qualifications, compared to 60 percent in non-green public sector jobs. Male public sector workers show weaker matching in both categories, with 36 percent appropriately matched in green jobs and 29 percent in non-green jobs, alongside substantial underqualification (36 percent in green jobs, 50 percent in non-green jobs). Private sector employment shows higher rates of overqualification across all categories. Female private sector green workers show 53 percent appropriate matching and 41 percent overqualification, whilst male private sector green workers show 37 percent appropriate matching and 45 percent overqualification. Overall, green jobs demonstrate slightly better matching compared to non-green jobs, with green jobs showing higher overqualification rates but lower underqualification rates.

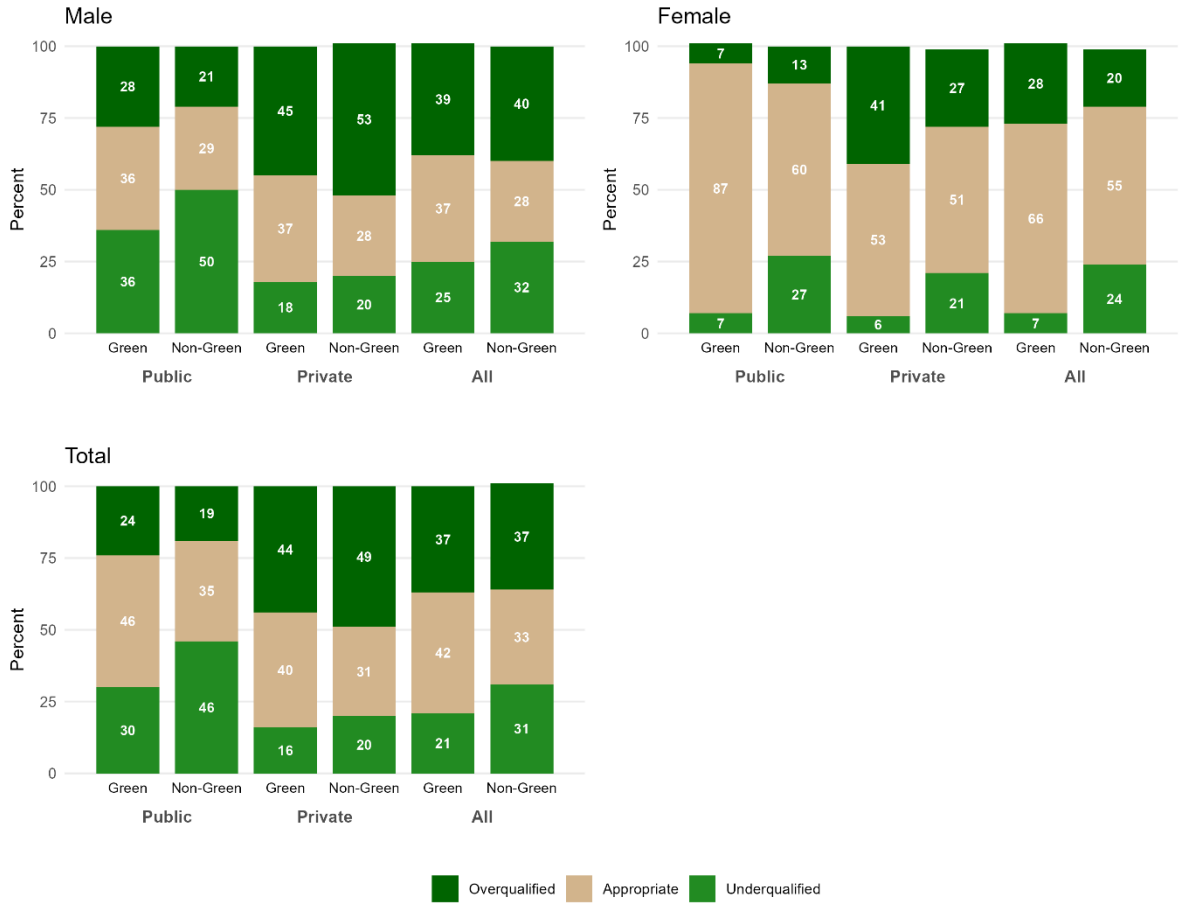
Figure 12. Distribution of required education (in percentage), green job status, institutional sector and gender, ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

The patterns indicate that educational matching is strongest for women in public sector green jobs, whilst most other categories show substantial mismatching, particularly through overqualification in the private sector and underqualification in male public sector employment.

Figure 13. Educational matching by green job status (in percentage), by green job status, institutional sector, and gender, ages 15-64



3.5. Summary

The analysis reveals that green employment in Jordan is widespread but modest in intensity, with 133,000 Jordanian workers (9 percent of total employment) engaged in green activities that are predominantly process-oriented, particularly energy efficiency work. The vast majority of employment occurs in occupations with at least some green activity, with only 7-9 percent of workers in occupations with zero green penetration.

Examining trends over time, the analysis shows gradual intensification of green employment rather than rapid transformation. The share of workers in Moderate Green occupations increased from 11 percent in 2010 to 16 percent in 2025, whilst High Green occupations grew from 5 to 6 percent. In absolute terms, Moderate Green employment nearly doubled from 135,000 to 248,000 workers. This shift from lower to higher green intensity categories suggests that environmental practices are

being progressively integrated across the labor market, with workers increasingly engaging in green activities as part of their employment.

Whilst women achieve higher overall rates of green employment (11 percent versus 8 percent for men), substantial sectoral variations exist in job quality. Female green workers in the public sector earn modest wage premiums, but private sector green employment for women shows a more complex picture, with formal green jobs offering significantly higher wages than non-green equivalents whilst informal green employment is characterized by exceptionally low wages. Green jobs generally do not offer substantial wage premiums compared to non-green employment at the aggregate level, likely reflecting broader labor market dynamics rather than characteristics unique to environmental work.

Educational matching patterns vary considerably by sector and gender. Female public sector green workers demonstrate strong educational matching at 87 percent, whilst other categories show substantial mismatching through overqualification in the private sector and underqualification in male public sector employment. The overall mismatch between worker qualifications and job requirements represents an opportunity for better skill-matching according to the needs of the labor market.

4. ICT Jobs

This section examines the characteristics and distribution of ICT employment in Jordan using both occupational and task-based definitions. It first discusses the rationale for using these complementary measurement approaches and the union definition employed in the main analysis, then covers the share and incidence of ICT jobs by sector, gender, and nationality. The analysis begins by presenting overall employment patterns for both Jordanian and non-Jordanian workers (Figure 15 only), then focuses exclusively on Jordanian workers for all subsequent analysis of ICT job characteristics, wages, benefits, and educational matching. It then examines the wages, benefits, and educational requirements of ICT workers compared to non-ICT employment.

4.1. ICT jobs definition comparison

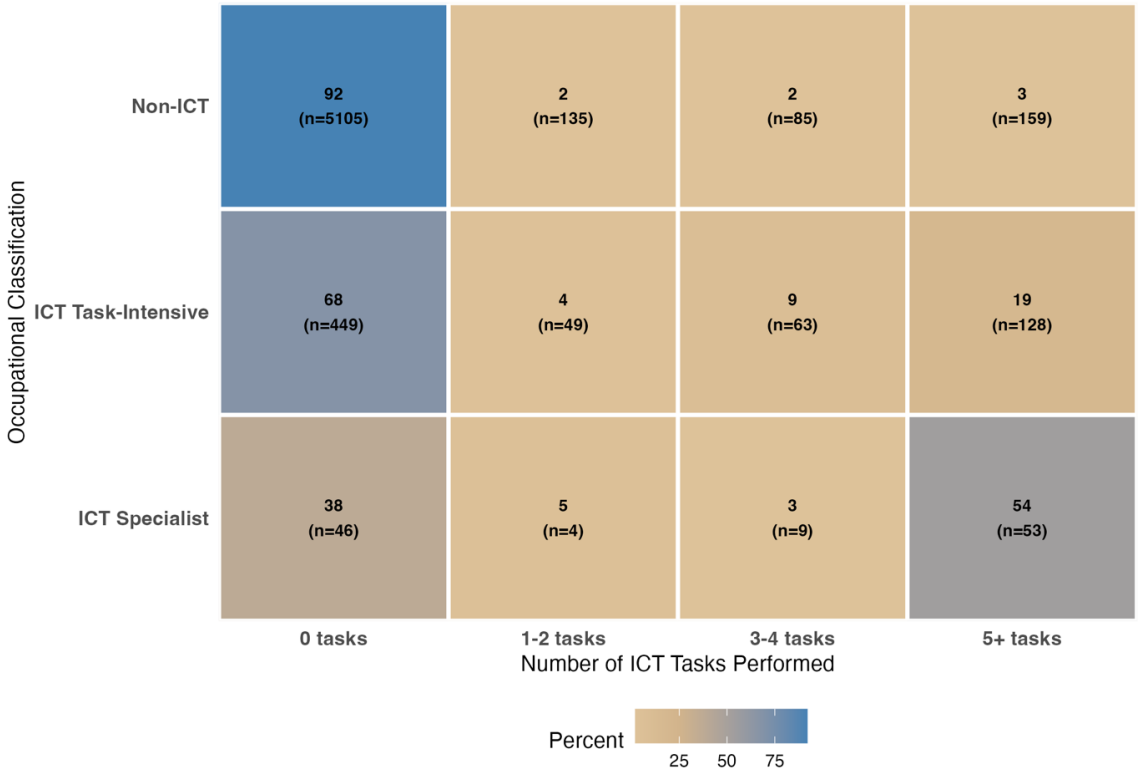
Figure 14 provides insights into the rationale for using both occupational and task-based definitions of ICT employment by demonstrating the distribution of actual ICT task performance across different occupational categories. The data reveals complex patterns that highlight the challenges of measuring digital work in Jordan's labor market.

Both ICT specialists and ICT task-intensive workers (ILO-defined occupations) show substantial variation in actual ICT task performance. ICT specialists demonstrate 38 percent performing no

ICT tasks, whilst 54 percent engage in 5+ tasks. ICT task-intensive workers show 68 percent performing 0 tasks, with 19 percent engaged in 5+ tasks. Meanwhile, 92 percent of non-ICT workers perform zero ICT tasks, confirming the distinctiveness of this category. However, whilst only small proportions of non-ICT workers perform intensive ICT tasks (2 percent performing 3-4 tasks, 3 percent performing 5+ tasks), these represent large absolute numbers given the size of the non-ICT occupational category.

The variation within occupational categories indicates that neither definition alone fully captures the breadth of ICT-intensive work in Jordan's economy. The task-based approach identifies workers performing intensive digital tasks regardless of formal job classifications, whilst occupational definitions capture roles formally designated as ICT-focused. To ensure maximum coverage of ICT roles whilst maintaining analytical clarity, the main analysis focuses on the union of these two definitions - workers who meet either the occupational criteria or the task-based criteria (three or more ICT tasks). Charts containing the individualized occupational-only and task-based-only data are included in the annex for reference.

Figure 14. Distribution of ICT task performance by occupational classification (OECD) (in percentage), ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

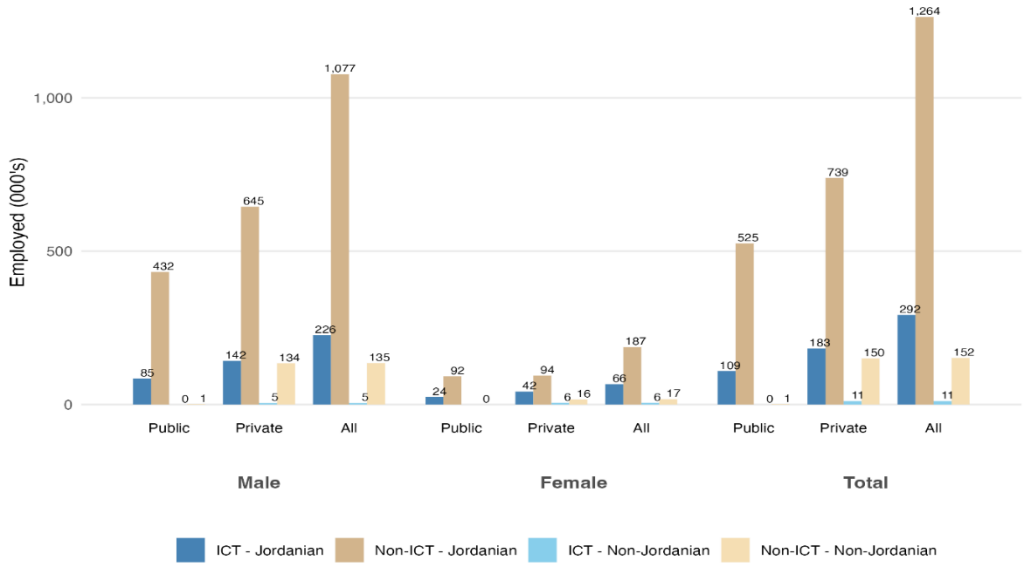
4.2. ICT jobs incidence and distribution

Figure 15 shows the number of people employed in ICT and non-ICT activities in Jordan using the union definition, split by institutional sector, gender, and nationality. This is the only figure in this section that includes non-Jordanian workers; all subsequent figures present Jordanian workers only. The absolute distribution of employment reveals the scale and concentration of ICT jobs across Jordan's labor market.

ICT jobs among Jordanian workers total 292,000, with a pronounced gender imbalance that mirrors broader labor market participation patterns. Male Jordanian workers dominate ICT employment in absolute terms, accounting for 226,000 of total ICT jobs compared to 66,000 female ICT workers. This approximately 3.5:1 ratio reflects the significantly higher overall male labor force participation alongside gender-specific barriers to entry into technology roles. Non-Jordanian ICT employment totals 11,000 workers, evenly split between male (5,000) and female (6,000) workers.

Within the Jordanian workforce, ICT employment shows concentration in the private sector with 183,000 workers compared to 109,000 in the public sector. This pattern holds across both genders, with male workers showing 142,000 in the private sector versus 85,000 in the public sector, and female workers showing 42,000 in the private sector versus 24,000 in the public sector.

Figure 15. Number employed in ICT and non-ICT activities (in thousands) by institutional sector, gender, and nationality (union definition), ages 15-64, 2025



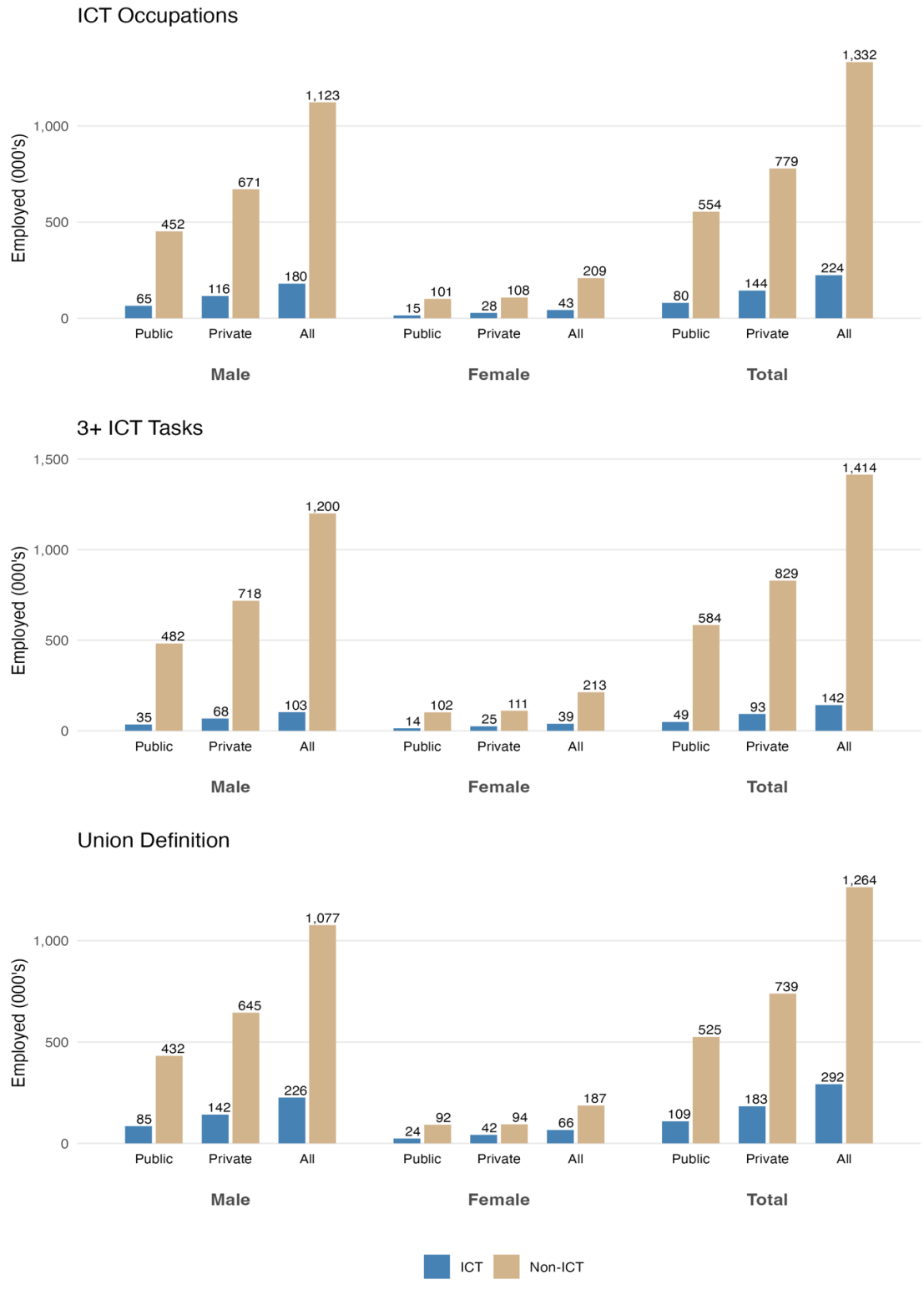
Source: Authors calculations based on JLMPS 2025

Figure 16 compares ICT employment across the three measurement approaches: ICT occupations, task-based (3+ ICT tasks), and the union definition. The comparison reveals how different definitions capture varying aspects of digital work in Jordan's labor market.

ICT occupations identify 224,000 Jordanian ICT workers, with male workers accounting for 180,000 and female workers 43,000, representing a roughly 4:1 gender ratio. The task-based definition (3+ ICT tasks) captures a smaller population of 142,000 workers, with 103,000 male and 39,000 female workers, representing a less extreme approximate 2.5:1 gender ratio. The union definition, combining both approaches, identifies the largest ICT workforce at 292,000 workers. The difference between the union definition total and the sum of the individual definitions indicates that occupational and task-based measures capture substantially different worker populations, with limited overlap between those in formal ICT occupations and those performing intensive ICT tasks.

The less extreme gender ratio under the task-based definition suggests that women may have better access to ICT-intensive work than to formal ICT occupations. This pattern indicates that pathways into digital work differ by gender, with women more likely to engage in intensive ICT tasks within non-ICT occupational classifications than to hold formally designated ICT specialist positions.

Figure 16. Number employed in ICT and non-ICT activities (in thousands) by institutional sector, gender, and ICT definition, ages 15-64, 2025



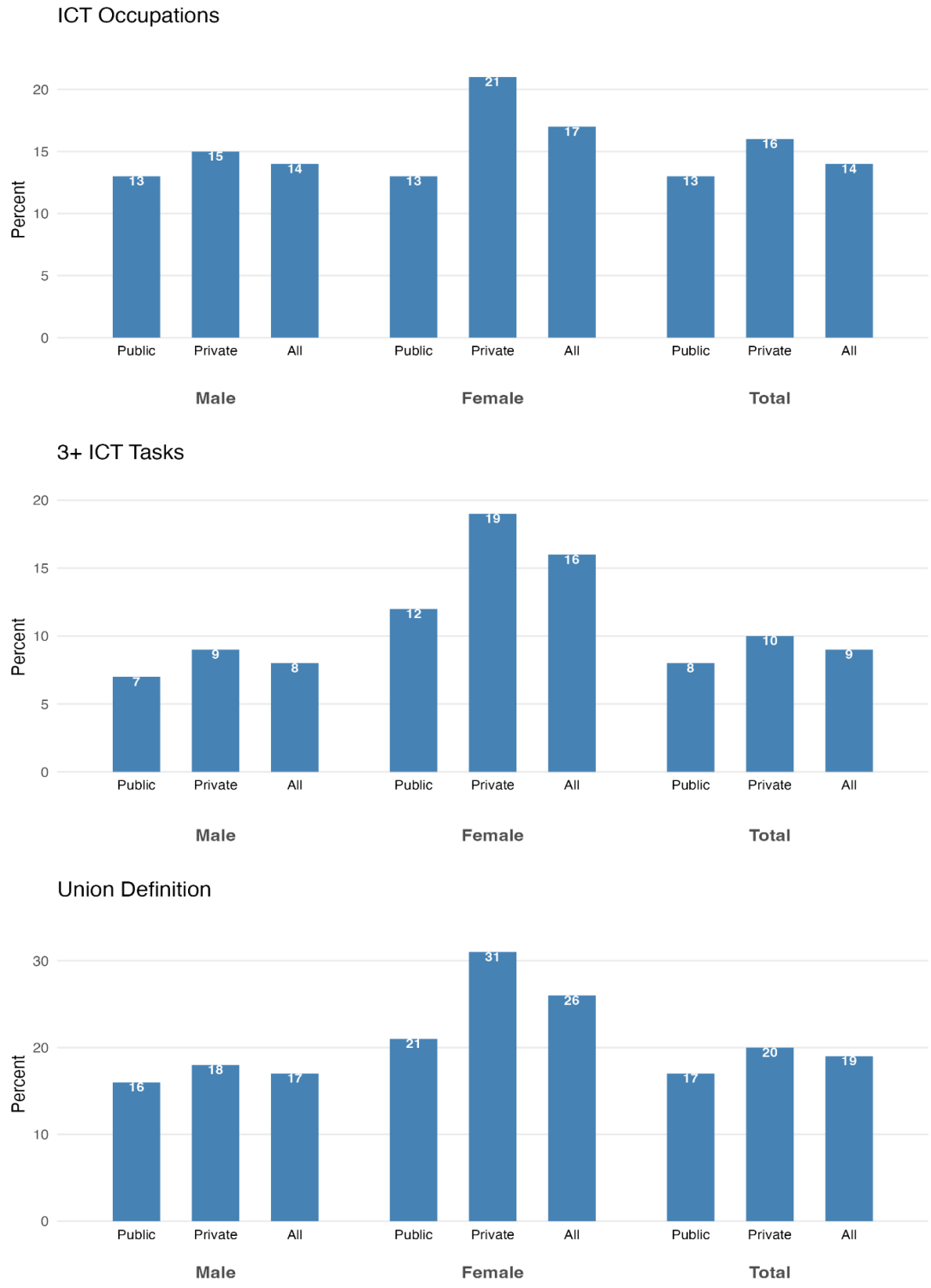
Source: Authors calculations based on JLMPS 2025

Figure 17 shows ICT employment as a share of total employment within each sector and gender category across all three definitions. Using the union definition, 19 percent of Jordanian workers are engaged in ICT activities overall, with notable variation by gender and sector.

Female Jordanian workers demonstrate substantially higher rates of ICT employment than male workers across all definitions. Under the union definition, 26 percent of female workers are engaged in ICT activities compared to 17 percent of male workers. This pattern is most pronounced in the private sector, where 31 percent of female workers meet ICT criteria compared to 18 percent of male workers. Public sector ICT employment shows 21 percent for female workers and 16 percent for male workers.

The occupational definition shows 14 percent overall ICT employment, with female workers at 17 percent and male workers at 14 percent. The task-based definition captures 9 percent of workers overall, with female workers showing 16 percent compared to 8 percent for male workers. The higher female participation rates across all definitions, particularly under the task-based measure, indicate that women who enter the labor force are more likely than men to engage in ICT-intensive work, even as absolute numbers remain lower due to overall female labor force participation patterns.

Figure 17. Share of ICT employment (in percentage) by institutional sector, gender, and ICT definition, ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

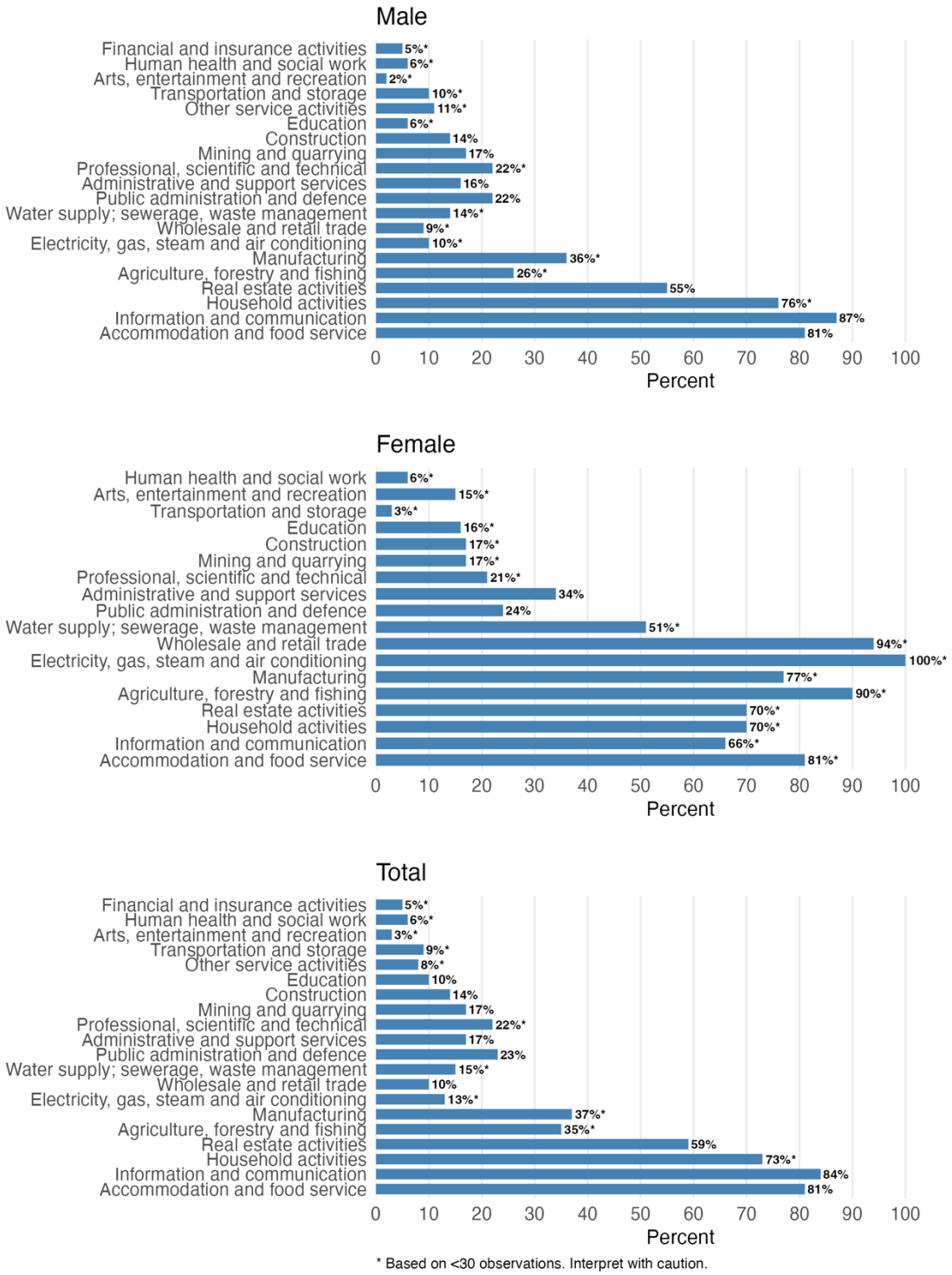
Figure 18 shows ICT employment shares across economic sectors using the union definition, revealing distinct patterns of digital work concentration. The data demonstrates extreme concentration in information and communication sectors alongside meaningful ICT employment across diverse industries.

Information and communication dominates ICT employment, with 66-87 percent of workers engaged in ICT activities across both genders. Household activities show similarly high rates at 70-76 percent, though these estimates are based on limited observations. Accommodation and food services demonstrate substantial ICT employment at 81 percent, whilst real estate activities show 55-70 percent ICT employment.

Manufacturing sectors reveal significant digital work intensity, with 36-77 percent of workers engaged in ICT activities depending on gender. Agriculture, forestry and fishing shows 26-90 percent ICT employment, though the female estimate reflects small sample effects. Public administration and defense demonstrates 22-24 percent ICT employment, whilst construction shows 14-17 percent. Traditional service sectors including education, transportation, and financial services show 5-16 percent ICT employment rates.

The sectoral distribution indicates that whilst ICT employment remains concentrated in technology-focused industries, meaningful digital work extends across diverse economic sectors. The substantial variation between sectors suggests different pathways for ICT skill development, with some industries requiring intensive digital capabilities whilst others show more limited ICT integration.

Figure 18. Share of ICT employment by economic sector (in percentage) and gender (union definition), ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

Note: Share of employment by economic sector for occupational-only and task-based definitions are presented in Annex Figures A1 and A2.

Trends in ICT employment over time

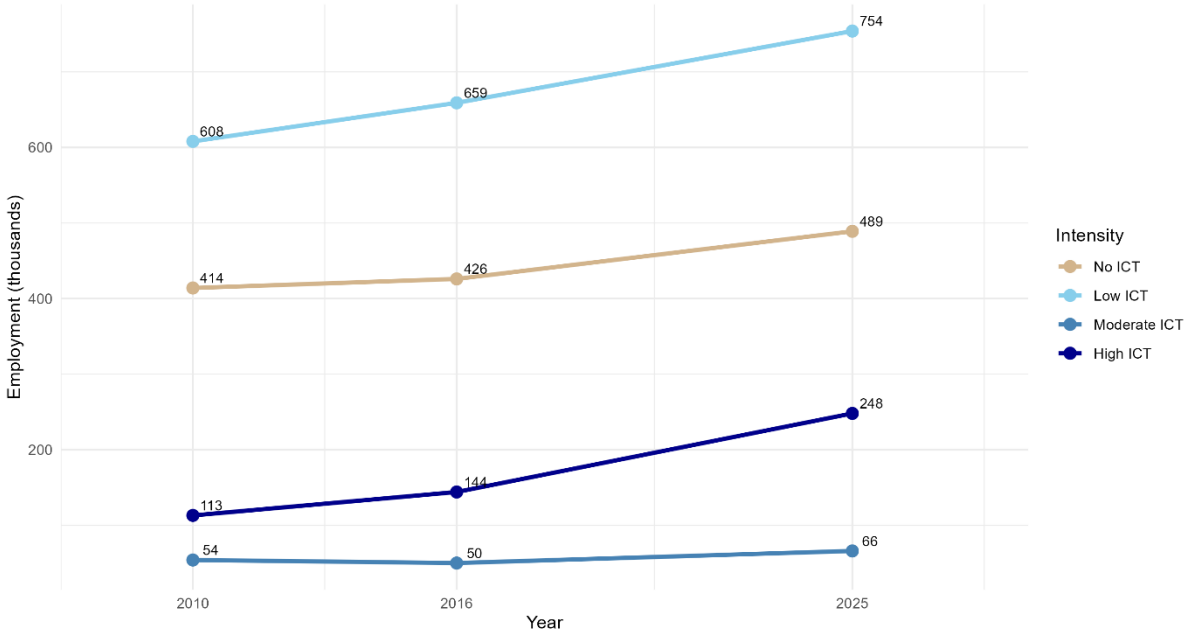
Figures 19 and 20 show employment trends across occupations classified by their ICT intensity, based on 2025 penetration rates applied retroactively to the 2010 and 2016 survey waves. The analysis reveals a more pronounced structural shift toward ICT-intensive employment compared to the gradual greening observed in the previous section, with substantial growth in high-intensity ICT occupations over the fifteen-year period.

The share of workers employed in High ICT occupations (40 percent or above penetration) increased from 10 percent in 2010 to 16 percent in 2025, representing the most significant shift across all intensity categories. Moderate ICT occupations (20-40 percent penetration) remained relatively stable at 4-5 percent throughout the period. Correspondingly, employment in occupations with no ICT activity declined from 35 percent to 31 percent, whilst Low ICT occupations (greater than zero but less than 20 percent) declined slightly from 51 to 48 percent. This pattern indicates a clear structural transformation toward ICT-intensive work across Jordan's labor market.

In absolute terms, employment in High ICT occupations more than doubled from 113,000 to 248,000 workers over the fifteen-year period, whilst Moderate ICT occupations expanded modestly from 54,000 to 66,000 workers. Employment in occupations with no ICT exposure grew from 414,000 to 489,000 workers, whilst Low ICT occupations expanded from 608,000 to 754,000 workers. The growth across all categories reflects overall employment expansion, but the disproportionate growth in High ICT occupations indicates that ICT-intensive roles are absorbing a growing share of new labor market entrants.

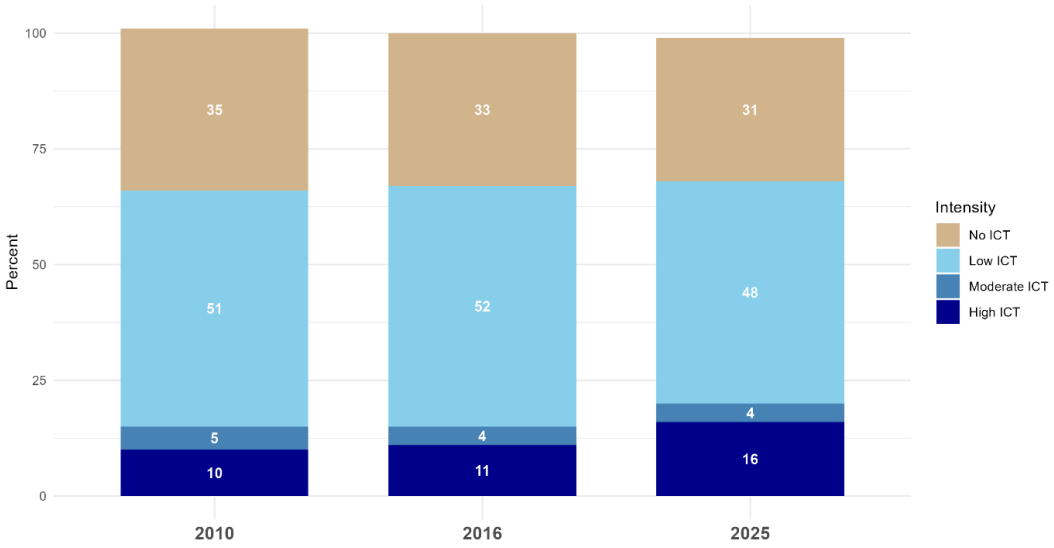
The decline in the No ICT category share from 35 to 31 percent, despite growth in absolute numbers, suggests that whilst non-digital occupations continue to expand, they are failing to keep pace with ICT-intensive occupations. This structural shift reflects broader digitalization trends in Jordan's economy and aligns with the Economic Modernization Vision's emphasis on technology-driven employment growth.

Figure 19. Employment by ICT occupation intensity (in thousands) (union definition), ages 15-64, 2010-2025



Source: Authors calculations based on JLMPS 2010, 2016, 2025

Figure 20. Employment share by ICT occupation intensity (in percentage) (union definition), ages 15-64, 2010-2025



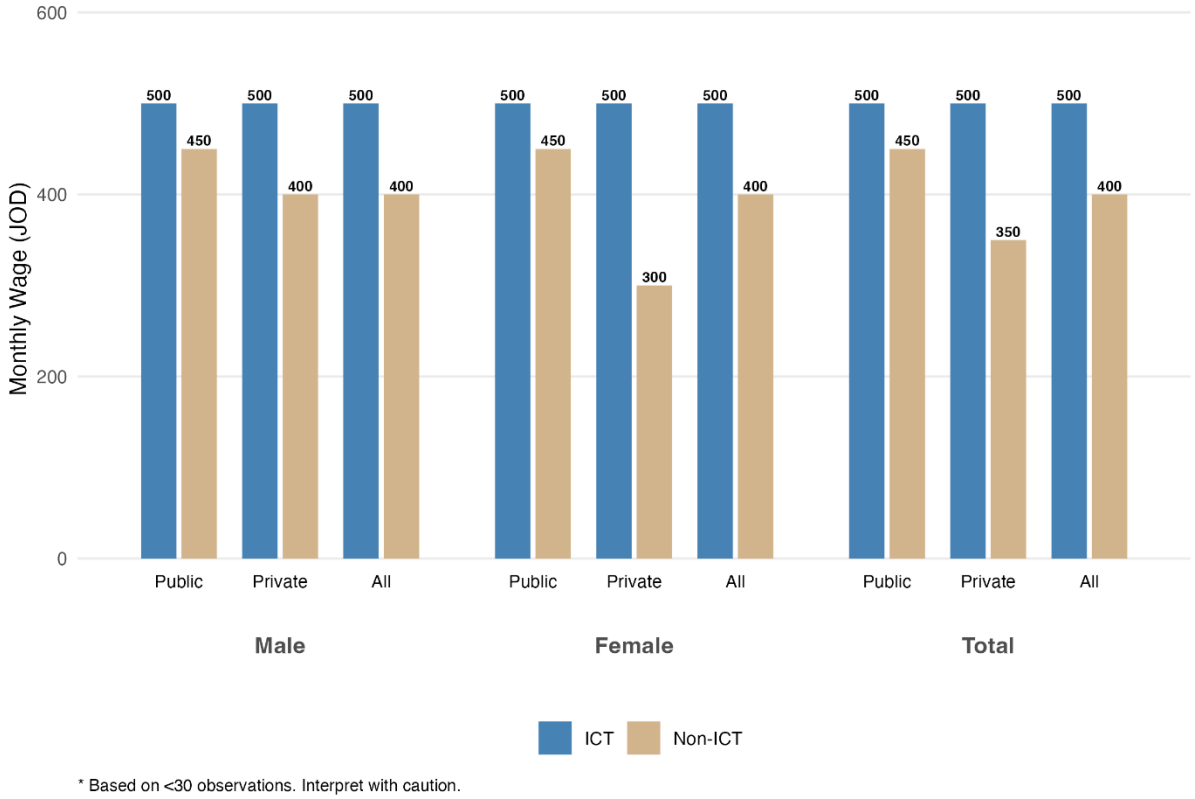
Source: Authors calculations based on JLMPS 2010, 2016, 2025

4.3. Wages

Figure 21 shows median monthly wages for ICT and non-ICT workers across institutional sectors and gender categories, using the union definition that captures workers meeting either occupational or task-based ICT criteria. The data reveals consistent wage premiums for ICT work across most sectors.

ICT workers earn 500 JOD monthly overall, representing a clear premium over non-ICT workers who earn 400 JOD. Male ICT workers earn uniform wages of 500 JOD across public, private, and all sectors combined, compared to 400-450 JOD for non-ICT male workers. Female ICT workers demonstrate more variation by sector, earning 500 JOD in both public and private sectors compared to 450 JOD and 300 JOD respectively for their non-ICT counterparts.

Figure 21. Median monthly wages (JOD) by ICT job status, institutional sector and gender (union definition), ages 15-64, 2025



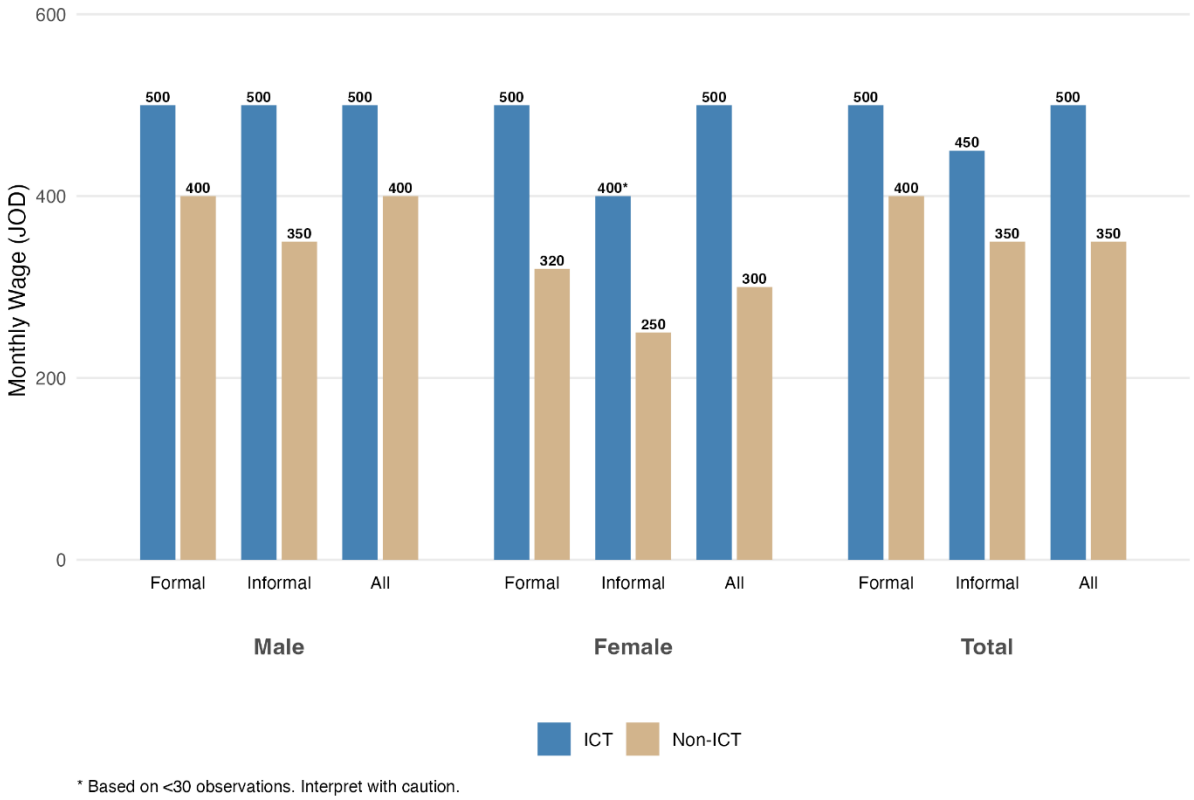
Source: Authors calculations based on JLMPS 2025

Note: Wage patterns for occupational-only and task-based definitions are presented in Annex Figure A3.

Figure 22 examines median monthly wages by employment formality status, revealing how the ICT wage premium interacts with formal employment arrangements. ICT workers in formal employment earn 500 JOD monthly compared to 350 JOD for non-ICT workers. Male ICT workers in formal positions earn 500 JOD versus 400 JOD for non-ICT workers, whilst female ICT workers earn 500 JOD compared to 320 JOD for non-ICT workers.

Informal employment shows different patterns, with ICT workers earning 500 JOD compared to non-ICT workers at 350 JOD for males. Female informal ICT employment shows 400 JOD, though this estimate is based on limited observations and should be interpreted with caution. The overall pattern confirms that ICT employment provides wage premiums particularly in formal arrangements, with the premium most pronounced for female workers where the gap between ICT and non-ICT wages reaches 180 JOD in formal employment.

Figure 22. Median monthly wages (JOD) by ICT job status and employment formality (private sector only), by gender (union definition), ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

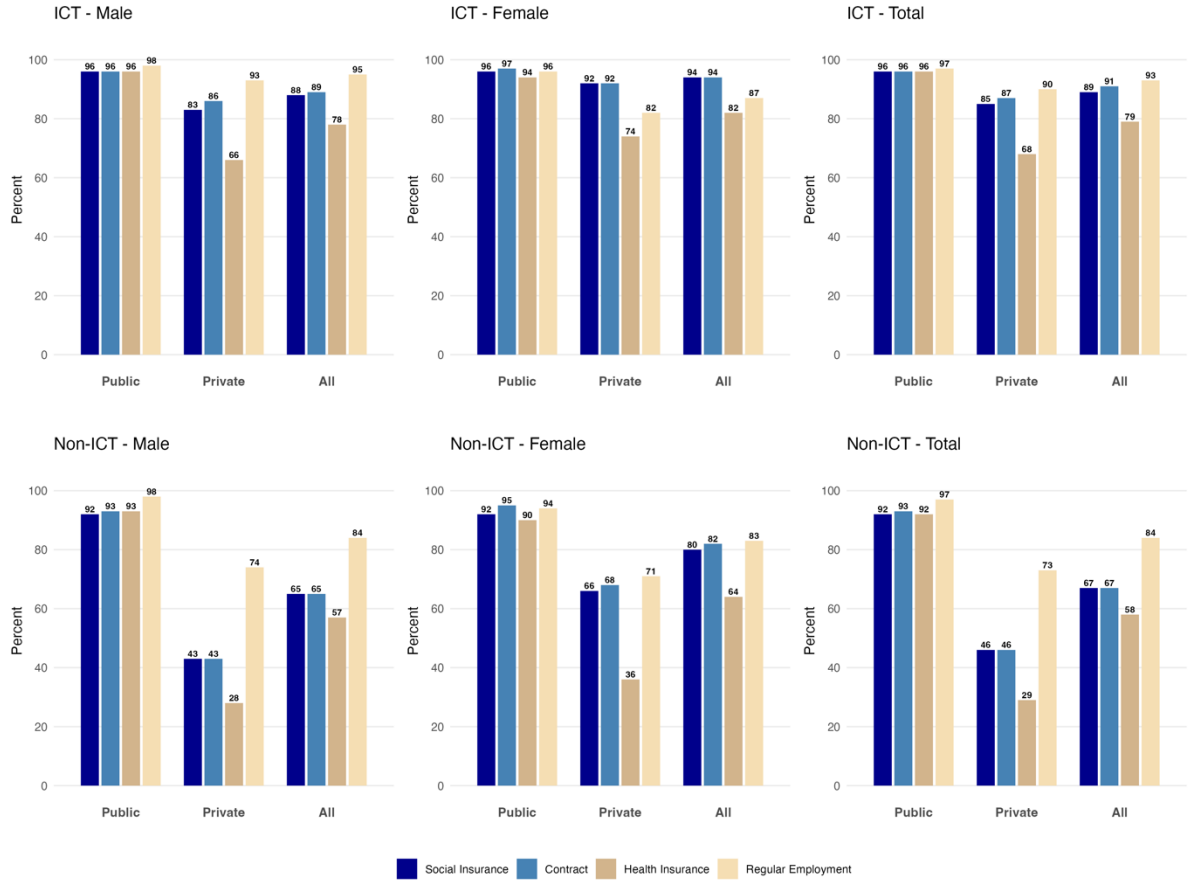
Note: Wage patterns for occupational-only and task-based definitions are presented in Annex Figure A4.

4.4. Benefits

Figure 23 shows access to employment benefits for ICT and non-ICT workers using the union definition. The data reveals that ICT workers enjoy superior benefit provision compared to non-ICT workers, with particularly pronounced differences in the private sector.

Public sector workers demonstrate high benefit coverage regardless of ICT status, with rates above 90 percent for all categories. Male ICT workers receive 96-98 percent coverage across benefit types, comparable to the 92-98 percent for non-ICT workers. Female ICT workers show similarly high rates at 94-97 percent compared to 90-95 percent for non-ICT workers.

Figure 23. Benefits by ICT job status, institutional sector and gender (union definition), ages 15-64, 2025



Source: Authors' calculations based on JLMPS 2025

Note: Benefit patterns for occupational-only and task-based definitions are presented in Annex Figures A5 and A6.

The private sector reveals substantial ICT advantages in benefit provision. Male ICT workers receive 66-93 percent benefit coverage compared to 28-74 percent for non-ICT workers, representing improvements of 20-40 percentage points across benefit categories. Female ICT workers show 74-92 percent coverage versus 36-71 percent for non-ICT workers. The overall patterns indicate that private sector ICT employment provides markedly better access to social insurance, written contracts, health insurance, and regular employment compared to non-ICT positions.

4.5. Education

Figure 24 shows that ICT positions require substantially higher educational qualifications than non-ICT roles across all sectors. Public sector ICT positions require tertiary education for 79-92 percent of workers compared to 21-72 percent for non-ICT roles, with female positions showing particularly high requirements. Private sector ICT positions require tertiary education for 83-87 percent of workers versus 11-39 percent for non-ICT roles. Overall, ICT positions require tertiary education for 83 percent of workers compared to 21 percent for non-ICT employment.

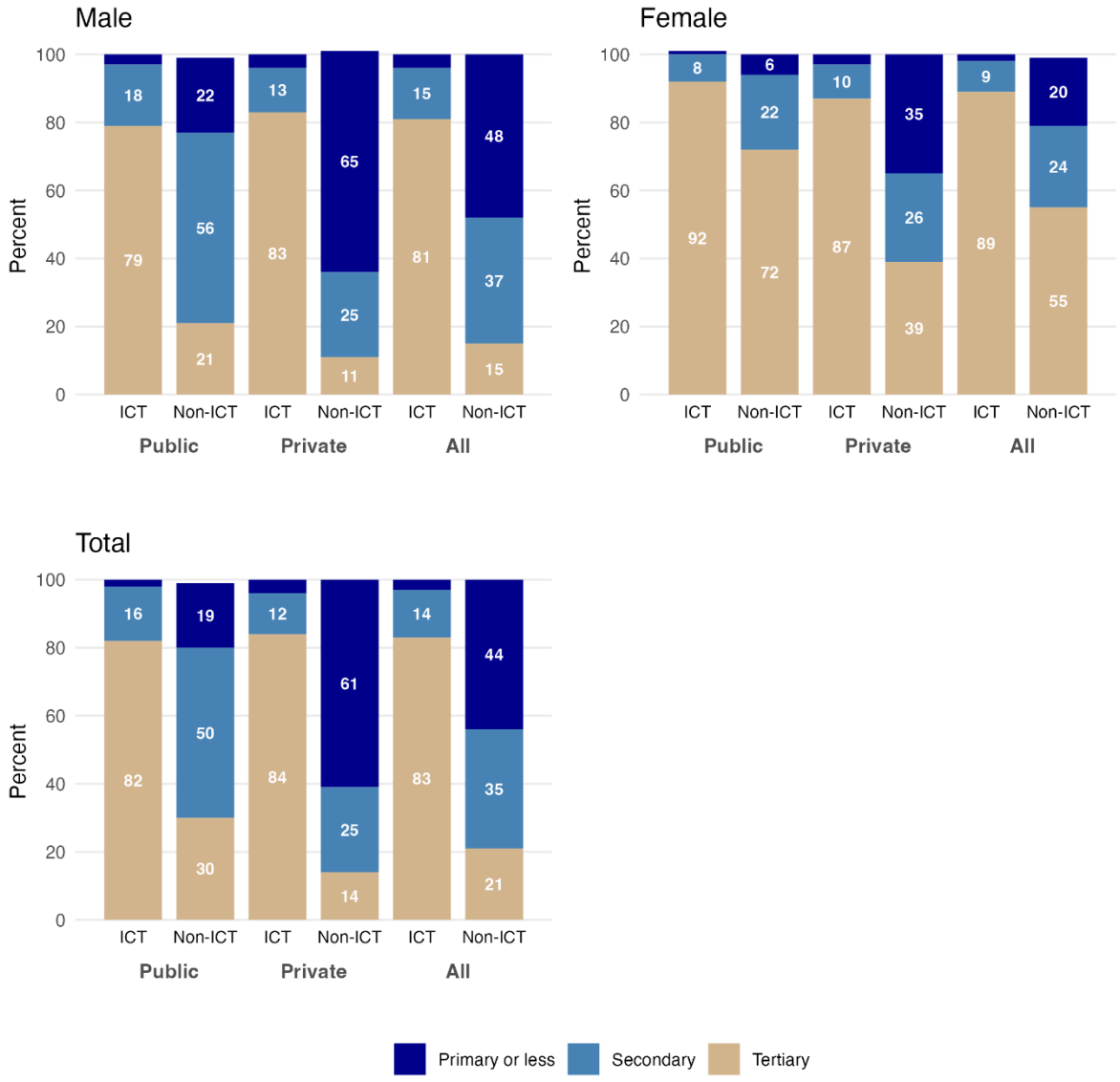
Figure 25 reveals varied educational matching patterns across sectors and gender. ICT workers demonstrate substantially higher rates of appropriate educational matching compared to non-ICT workers across most categories. In public sector positions, 70-79 percent of ICT workers possess appropriate qualifications compared to 21-58 percent for non-ICT workers. Private sector ICT workers show 79-87 percent appropriate matching compared to 17-35 percent for non-ICT workers. Overall, 76-84 percent of ICT workers are appropriately matched to their positions compared to 19-47 percent for non-ICT workers.

Underqualification rates are notably lower for ICT workers than non-ICT workers. Public sector ICT positions show 7-14 percent underqualification compared to 30-56 percent for non-ICT roles. Private sector ICT workers show 5-9 percent underqualification compared to 22-27 percent for non-ICT workers. Overall, 5-11 percent of ICT workers are underqualified compared to 28-36 percent of non-ICT workers. Overqualification rates are similar across ICT and non-ICT employment in the public sector, ranging from 12-14 percent for female workers and 16-22 percent for male workers. However, private sector non-ICT workers have significantly higher rates of overqualification than ICT workers, ranging from 9-12 percent for ICT and 38-61 percent for non-ICT.

The patterns indicate that ICT employment demonstrates substantially better educational matching than non-ICT employment, with ICT workers more likely to possess qualifications appropriate to their positions. The high rates of overqualification in private sector non-ICT employment compared to ICT roles suggest that ICT positions are more effectively absorbing highly educated

workers, whilst other private sector roles are failing to provide sufficient skilled employment opportunities for Jordan's educated workforce. This pattern may reflect both the clearer credentialing pathways in technology-related roles and the broader challenge of generating high-quality employment that matches the educational attainment of labor market entrants.

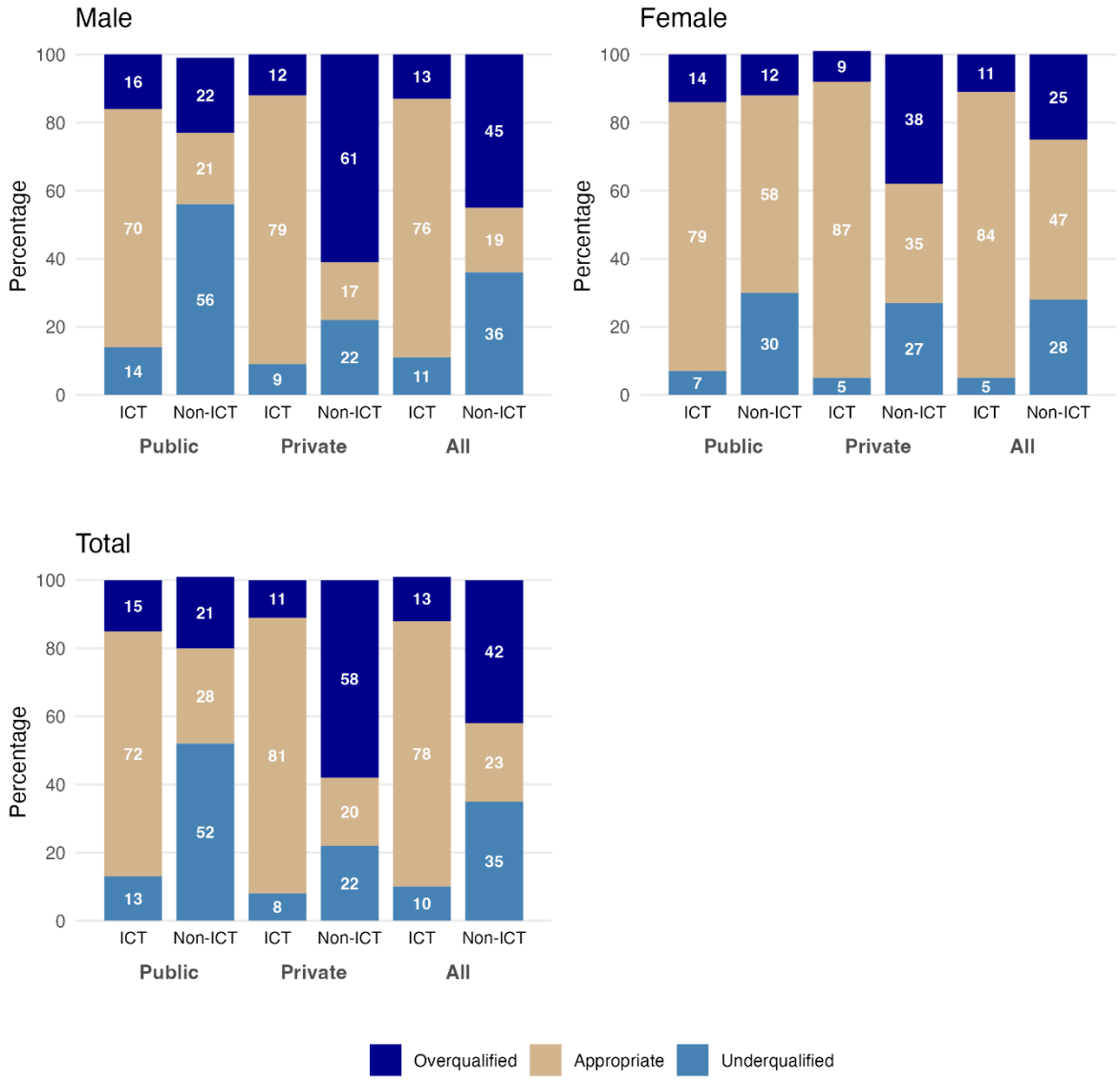
Figure 24. Distribution of required education (in percentage) by ICT job status, institutional sector and gender (union definition), ages 15-64, 2025



Source: Authors' calculations based on JLMPS 2025

Note: Educational requirements for occupational-only and task-based definitions are presented in Annex Figure A7.

Figure 25. Educational matching by ICT job status (in percentage), institutional sector and gender (union definition), ages 15-64, 2025



Source: Authors' calculations based on JLMPS 2025

Note: Educational requirements for occupational-only and task-based definitions are presented in Annex Figure A8.

4.6. Summary

The analysis reveals that ICT employment in Jordan demonstrates substantial wage premiums, better job quality, and stronger educational matching compared to non-ICT work, alongside a clear structural shift toward ICT-intensive occupations over time. The share of workers in High ICT occupations increased from 10 percent in 2010 to 16 percent in 2025, with employment in these

occupations more than doubling from 113,000 to 248,000 workers. This transformation reflects broader digitalization trends and aligns with the Economic Modernization Vision's emphasis on technology-driven employment growth.

Using the union definition, 292,000 Jordanian workers (19 percent of total employment) are engaged in ICT activities. Whilst male workers dominate ICT employment in absolute terms with an approximate 3.5:1 ratio, female workers achieve higher rates of ICT participation at 26 percent compared to 18 percent for men. This pattern is most pronounced under the task-based definition, suggesting that women have better access to ICT-intensive work than to formal ICT specialist positions.

ICT workers earn consistent wage premiums across sectors, with ICT employment providing 500 JOD monthly compared to 400 JOD for non-ICT workers. ICT employment also offers superior benefit coverage, particularly in the private sector where ICT workers receive substantially higher rates of social insurance and contracts than non-ICT counterparts. Unlike non-ICT employment, ICT jobs demonstrate substantially better educational matching, with 76-84 percent of ICT workers possessing qualifications appropriate to their positions compared to 19-47 percent for non-ICT workers. The high rates of overqualification in private sector non-ICT employment (38-61 percent) compared to ICT roles (9-12 percent) suggest that ICT positions are more effectively absorbing highly educated workers, whilst other private sector roles are failing to provide sufficient skilled employment opportunities for Jordan's educated workforce.

5. ICT & green jobs

This section examines green jobs and ICT jobs together, comparing their employment distribution and wages using the union definition of ICT employment (combining both occupational and task-based measures). As there is a relatively small overlap between the jobs, this analysis has been restricted to Jordan only for employment. It explores the relative scale of these two employment categories and identifies workers engaged in both green and ICT activities simultaneously, examining how this intersection affects job quality and compensation.

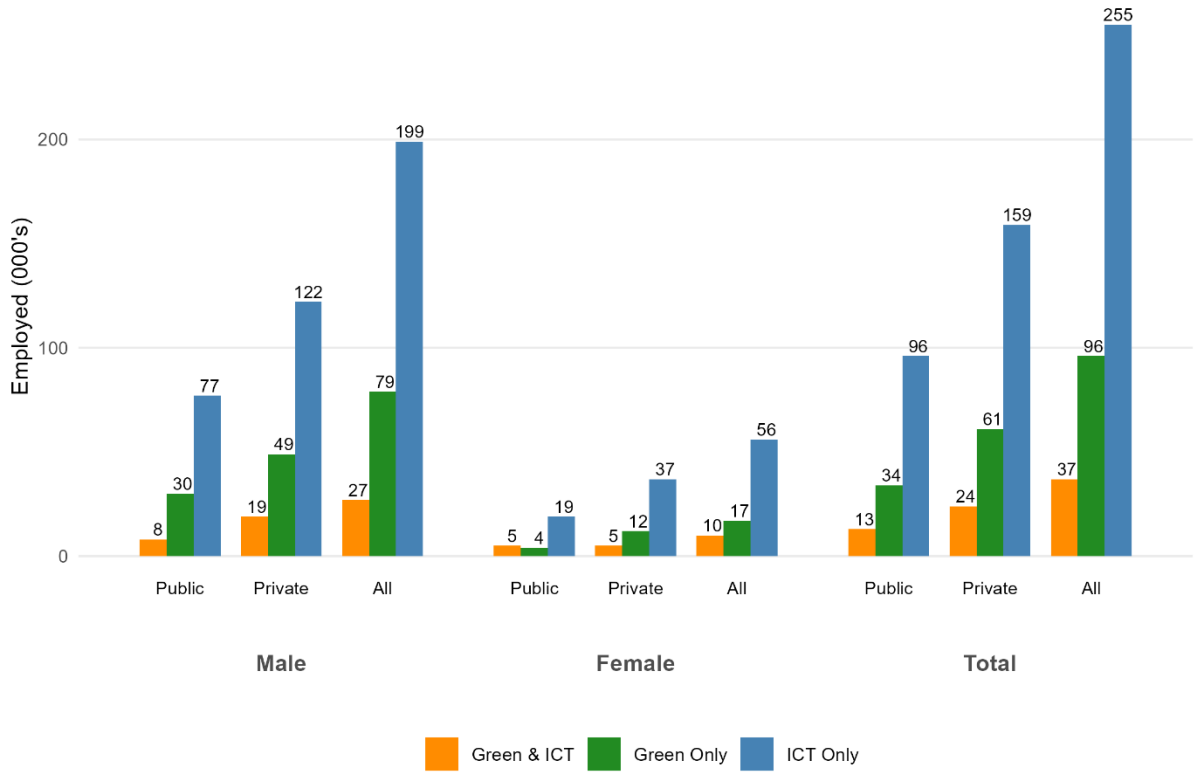
5.1. Employment

Figure 26 compares green and ICT employment using the union definition of ICT jobs, revealing the relative scale of these two employment categories and the limited overlap between them. The analysis identifies three distinct groups: workers in green-only jobs, ICT-only jobs, and those engaged in both activities.

Total employment across these categories reaches 388,000 workers, with ICT-only jobs representing the largest segment at 255,000 workers, followed by green-only jobs at 96,000 workers, and a small intersection of 37,000 workers engaged in both green and ICT activities. The limited overlap (10% of combined employment) suggests that green jobs and ICT jobs represent largely distinct employment pathways, with minimal integration between environmental and digital competencies in Jordan's current labor market.

Male workers dominate all three categories in absolute terms, accounting for 199,000 ICT-only jobs, 79,000 green-only jobs, and 27,000 combined green-ICT roles. Female workers show substantially smaller numbers across all categories: 56,000 in ICT-only positions, 17,000 in green-only jobs, and 10,000 in combined roles. The gender ratio is most balanced in combined employment (approximately 2.5:1) compared to ICT-only work (approximately 4:1) and green-only work (approximately 5:1).

Figure 26. Employment distribution for green and ICT jobs (in thousands) by institutional sector and gender (union definition), ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

The private sector employs 244,000 workers across all three categories compared to 143,000 in the public sector. Within the private sector, ICT-only employment dominates at 159,000 workers (65 percent of private sector total), with green-only jobs at 61,000 workers (25 percent) and combined positions at 24,000 (10 percent). The public sector shows a similar pattern with 96,000 ICT-only workers (67 percent), 34,000 green-only workers (24 percent), and 13,000 in combined roles (9 percent). The similar proportional distribution across sectors suggests that the relationship between green and ICT employment follows consistent patterns regardless of institutional context.

5.2. Wages

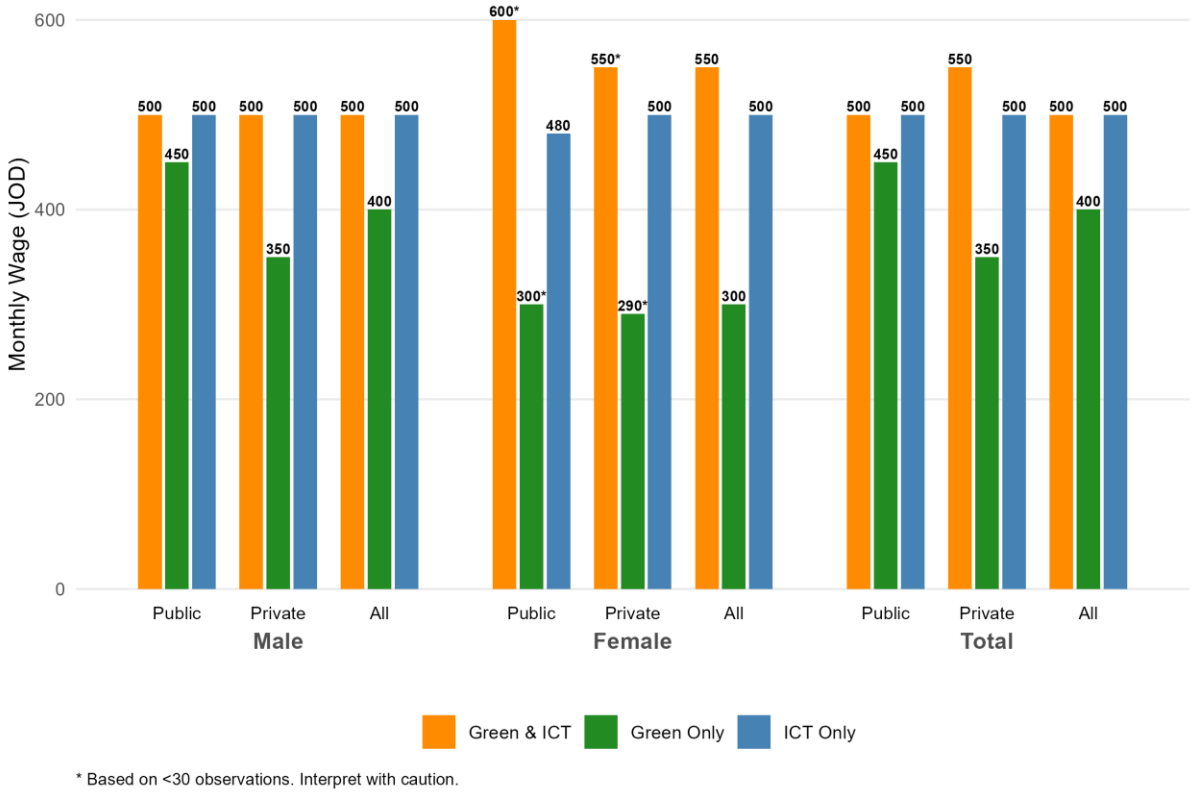
Figure 27 shows median monthly wages for workers categorized by their engagement in green jobs, ICT jobs, or both simultaneously.

Male workers show relatively consistent wages across ICT and combined job types, but notably lower wages in green-only employment. In the public sector, male workers earn 500 JOD in combined roles, 450 JOD in green-only positions, and 500 JOD in ICT-only positions. Private sector male wages show more variation, with 500 JOD for combined roles but only 350 JOD for green-only work compared to 500 JOD for ICT-only positions. Overall, male workers earn 500 JOD for combined work, 400 JOD for green-only, and 500 JOD for ICT-only employment.

Female workers demonstrate substantial variation, particularly in green-only employment. Public sector female workers earn 600 JOD in combined roles, 300 JOD in green-only positions, and 500 JOD in ICT-only jobs, though the combined and green-only estimates are based on limited observations. Private sector wages show 550 JOD for combined work, 290 JOD for green-only, and 490 JOD for ICT-only positions, with combined and green-only estimates again based on limited observations. Overall, female workers earn 600 JOD in combined roles, 290 JOD in green-only work, and 500 JOD in ICT-only employment.

The wage patterns reveal critical quality differences in green-only employment for both genders, though particularly pronounced for women. Green-only workers earn substantially less than their ICT-only counterparts across all categories, with male green-only workers earning 350-450 JOD compared to 500 JOD for ICT-only, and female green-only workers earning 290-300 JOD compared to 490-500 JOD for ICT-only positions. The gender gap is most stark in green-only employment, where women earn approximately 70-80 percent of male wages. The substantial premium for workers in combined green-ICT positions (500-600 JOD) suggests that well-compensated green jobs are predominantly office-based positions that utilize ICT skills alongside environmental responsibilities. This pattern indicates that pure green employment, without an ICT component, is concentrated in lower-skilled, lower-wage activities for both genders, with women particularly affected.

Figure 27. Median monthly wages (JOD) for green and ICT jobs by institutional sector and gender (union definition), ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

5.3. Summary

The analysis reveals that green and ICT employment represent largely distinct pathways in Jordan's labor market, with limited overlap between categories. Of the 388,000 workers engaged in either green or ICT activities, ICT-only employment accounts for 255,000 workers compared to 96,000 in green-only jobs, with just 37,000 workers (10 percent) combining both competencies.

The wage patterns reveal critical quality differences between these employment categories. ICT-only workers earn consistently higher wages at 500 JOD monthly across sectors and genders, whilst green-only workers earn substantially less at 350-450 JOD for men and 290-300 JOD for women. Workers in combined green-ICT positions earn premiums of 500-600 JOD, suggesting that well-compensated green jobs are predominantly office-based positions that utilize ICT skills alongside environmental responsibilities. The quality differential is particularly pronounced for female workers, where the gender gap is most stark in green-only employment. This pattern

indicates that pure green employment, without an ICT component, is concentrated in lower-skilled, lower-wage activities for both genders, with women particularly affected.

6. Conclusion

6.1. Discussion of results

This analysis reveals that green and ICT employment in Jordan represent distinct labor market segments with markedly different characteristics in terms of scale, quality, and trajectory. Using the 2025 JLMPS, we identify 125,000 Jordanian workers (9 percent) engaged in green activities and 292,000 (19 percent) in ICT activities, with limited overlap between the two categories.

The quality of these jobs differs substantially. ICT employment demonstrates clear advantages across multiple dimensions: higher wages (500 JOD monthly compared to 400-450 JOD for non-ICT workers), superior benefit coverage particularly in the private sector, and substantially better educational matching with 76-84 percent of workers possessing appropriate qualifications. Green employment, by contrast, more closely reflects broader labor market patterns, with wages and benefits largely comparable to non-green employment and no substantial premium for environmental work.

The time series analysis reveals divergent trajectories. ICT-intensive employment has grown substantially, with the share of workers in High ICT occupations increasing from 10 to 16 percent between 2010 and 2025, representing growth from 113,000 to 248,000 workers. Green employment shows more modest intensification, with Moderate Green occupations growing from 11 to 16 percent of employment. Both trends indicate structural shifts in Jordan's labor market, though the pace of digitalization substantially exceeds the greening of employment.

The comparative analysis of green-only, ICT-only, and combined employment reveals that well-compensated green jobs are predominantly those combining environmental responsibilities with ICT skills. Pure green employment, without an ICT component, is concentrated in lower-skilled, lower-wage activities for both genders, with women particularly affected. Female green-only workers earn 290-300 JOD monthly compared to 500 JOD for female ICT workers, whilst male green-only workers earn 350-450 JOD compared to 500 JOD for male ICT workers.

6.2. Opportunity for further research

This research could be advanced through several avenues. A deeper analysis of individual occupations within green and ICT categories would identify the specific roles driving the patterns observed, particularly the concentration of low-wage green employment. Linking skills data to

actual job tasks would clarify whether the educational mismatch in non-ICT employment reflects genuine skills gaps or credentialing failures.

The time series methodology employed here, applying 2025 occupation-level classifications retroactively, could be extended to examine wage and benefit trajectories over time, subject to data compatibility across survey waves.

Finally, the finding that combined green-ICT employment offers wage premiums comparable to ICT-only work warrants further investigation. Understanding the specific occupations and skills that characterize this intersection could inform training programs designed to develop green-tech competencies.

6.3. Policy implications

The findings reveal distinct policy challenges and opportunities for Jordan's Economic Modernization Vision. With green jobs currently concentrated in lower-skilled sectors and offering limited wage premiums despite high education requirements, there is clear scope for upgrading both the skill content and remuneration of green employment. Policy interventions should focus on developing higher-value green job opportunities that better utilize Jordan's educated workforce, particularly in emerging areas like renewable energy technology, environmental consulting, and green finance.

For ICT employment, the challenge lies in sustaining growth in what appears to be a high-quality employment sector that is effectively absorbing educated workers. The high rates of overqualification in non-ICT private sector employment (38-61 percent) compared to ICT roles (9-12 percent) suggest that expanding ICT employment could help address the broader challenge of generating sufficient skilled employment opportunities for Jordan's educated workforce. The relatively balanced gender participation in ICT roles, particularly under the task-based definition, indicates that expanding ICT skills training for women could address both sectoral growth and gender inclusion objectives.

The overlap between green and ICT employment, whilst currently small at 37,000 workers, represents a strategic opportunity. Workers combining both competencies earn wages comparable to ICT-only workers (500-600 JOD), substantially exceeding green-only wages. Digital technologies are increasingly essential for environmental monitoring, smart energy systems, and sustainable resource management. Developing skills at this intersection could position Jordan at the forefront of emerging green-tech industries whilst ensuring that green employment offers genuine pathways to economic mobility.

Finally, the quality differential between green and ICT jobs suggests that Jordan's future jobs strategy should emphasize upgrading green employment quality whilst continuing to expand ICT opportunities. The finding that pure green jobs pay substantially less than ICT jobs, particularly for women, indicates that environmental policy goals and employment quality goals may require deliberate integration rather than assuming that green job creation automatically delivers decent work outcomes.

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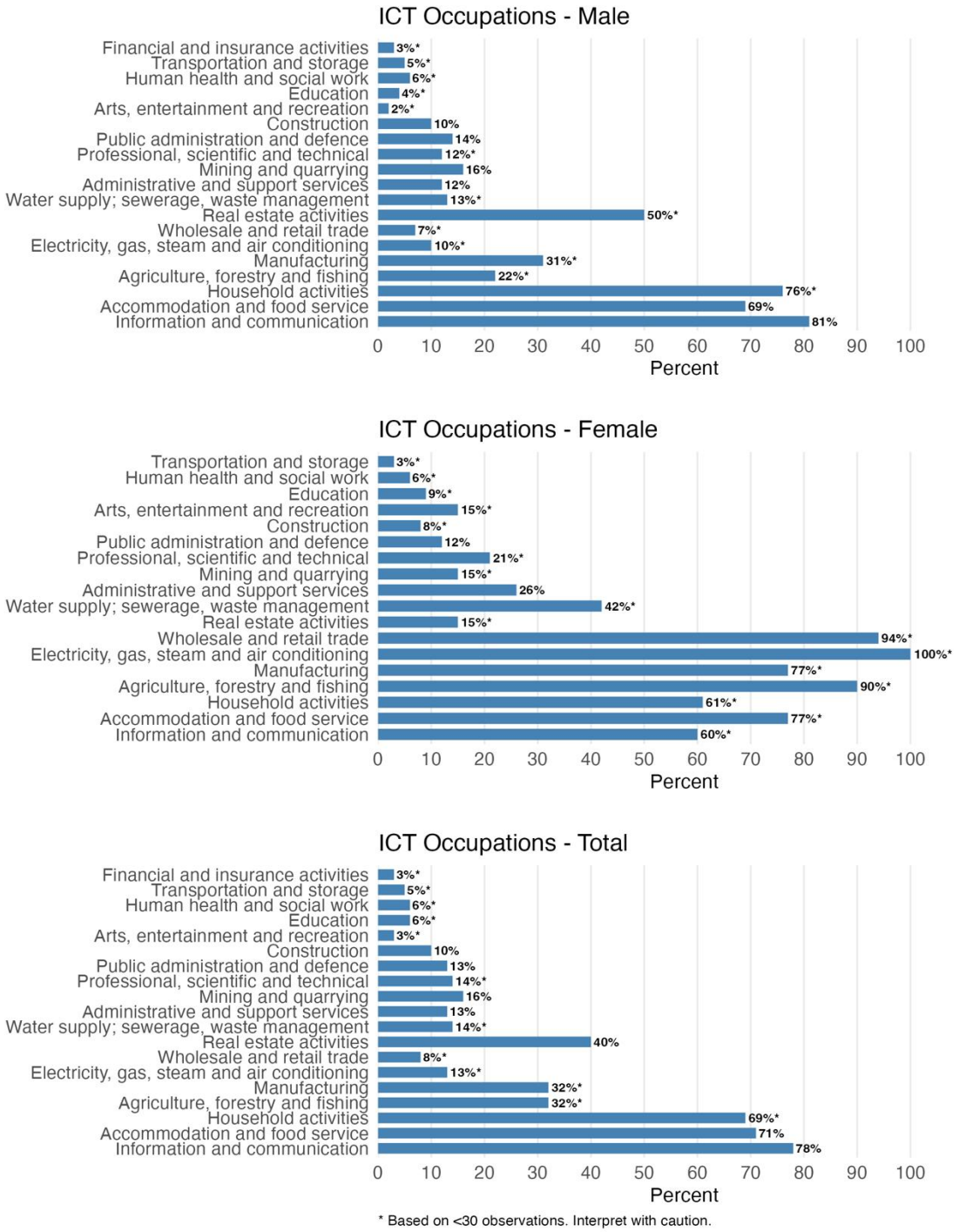
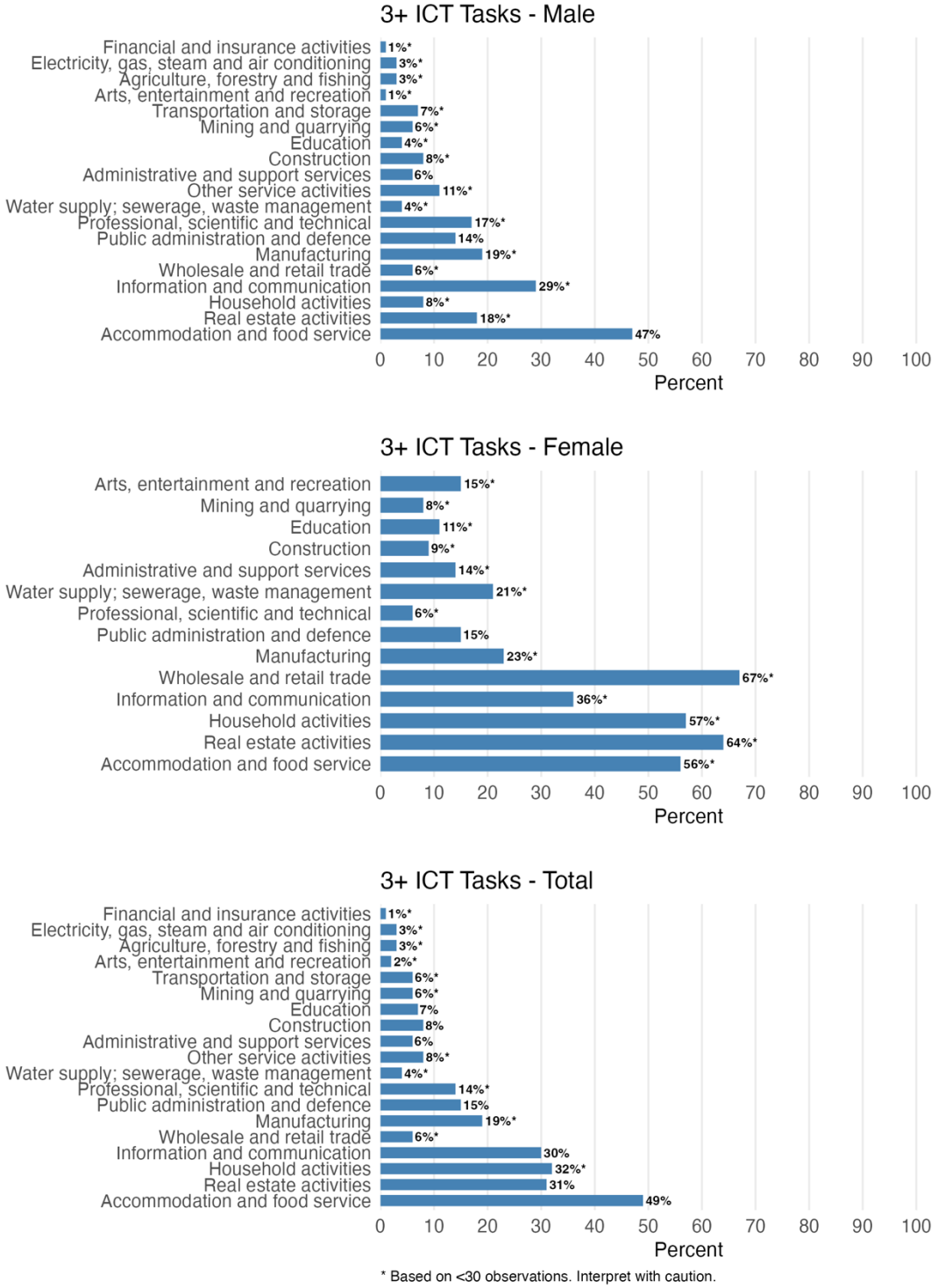
Annex

A1: Share of ICT employment by economic sector (in percentage) and gender (occupational definition), ages 15-64, 2025



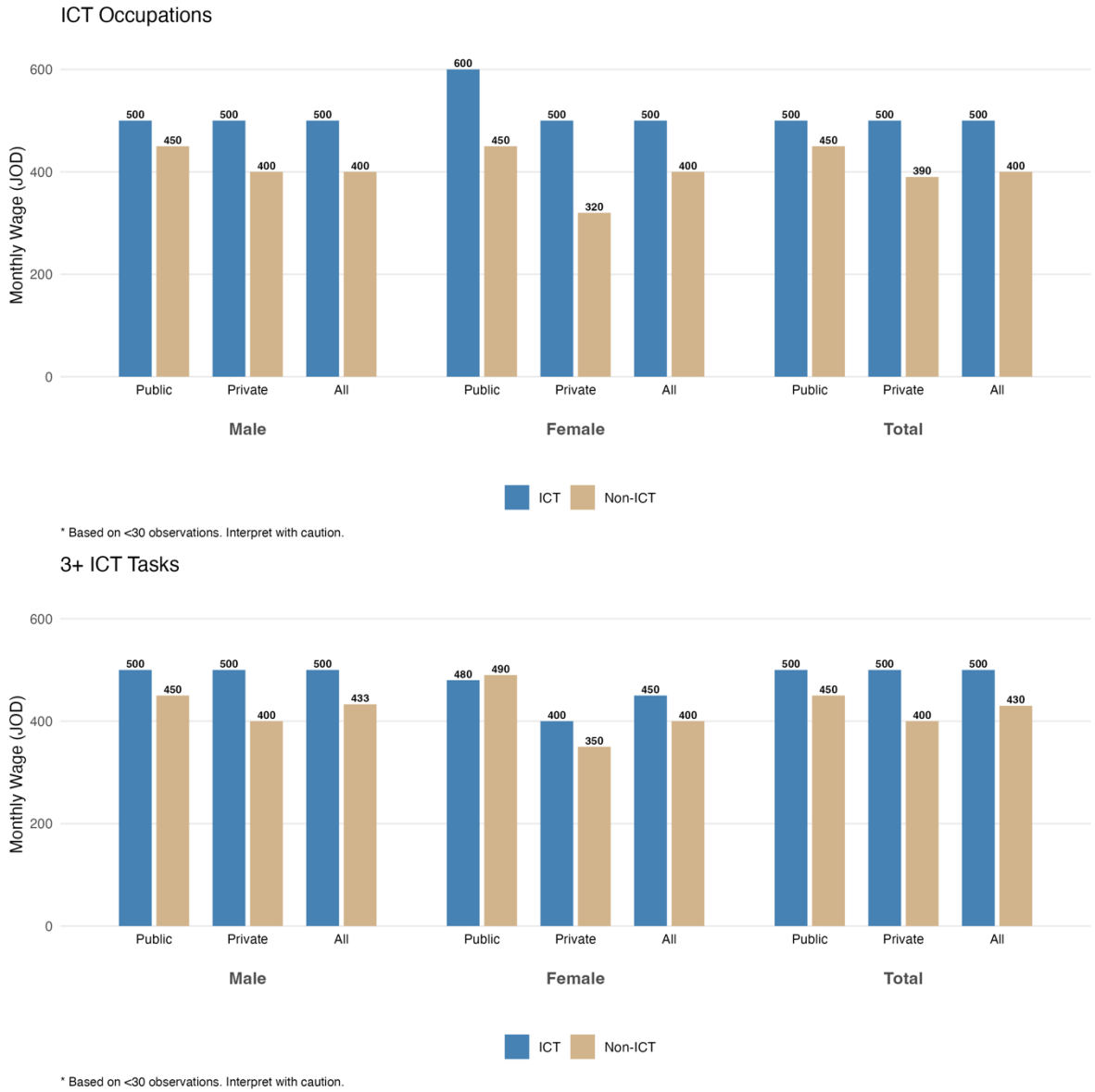
Source: Authors calculations based on JLMPS 2025

A2: Share of ICT employment by economic sector (in percentage) and gender (3+ tasks definition), ages 15-64, 2025



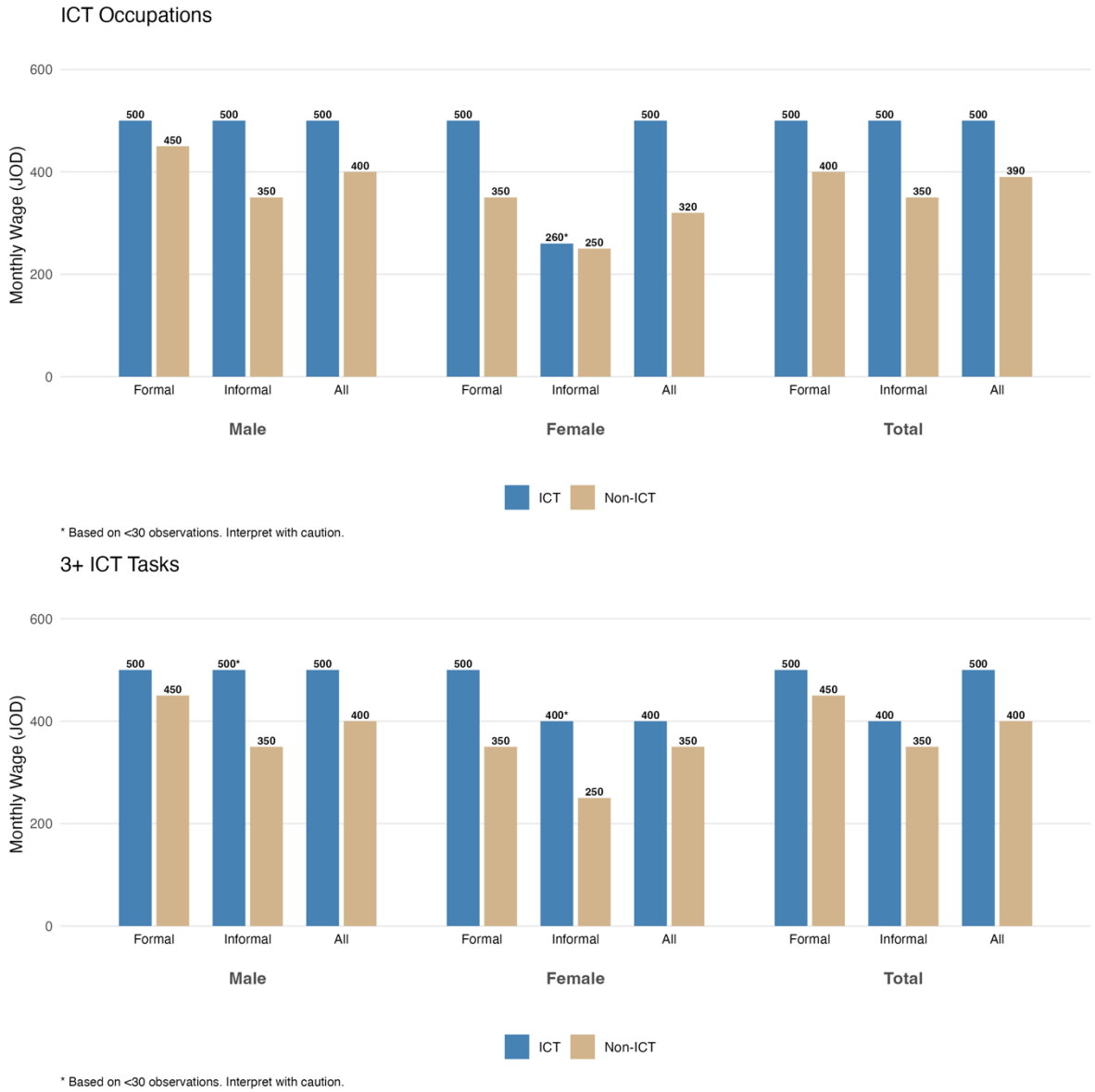
Source: Authors calculations based on JLMPS 2025

A3: Median monthly wages (JOD) by ICT job status, institutional sector and gender (occupational and 3+ tasks definitions), ages 15-64, 2025



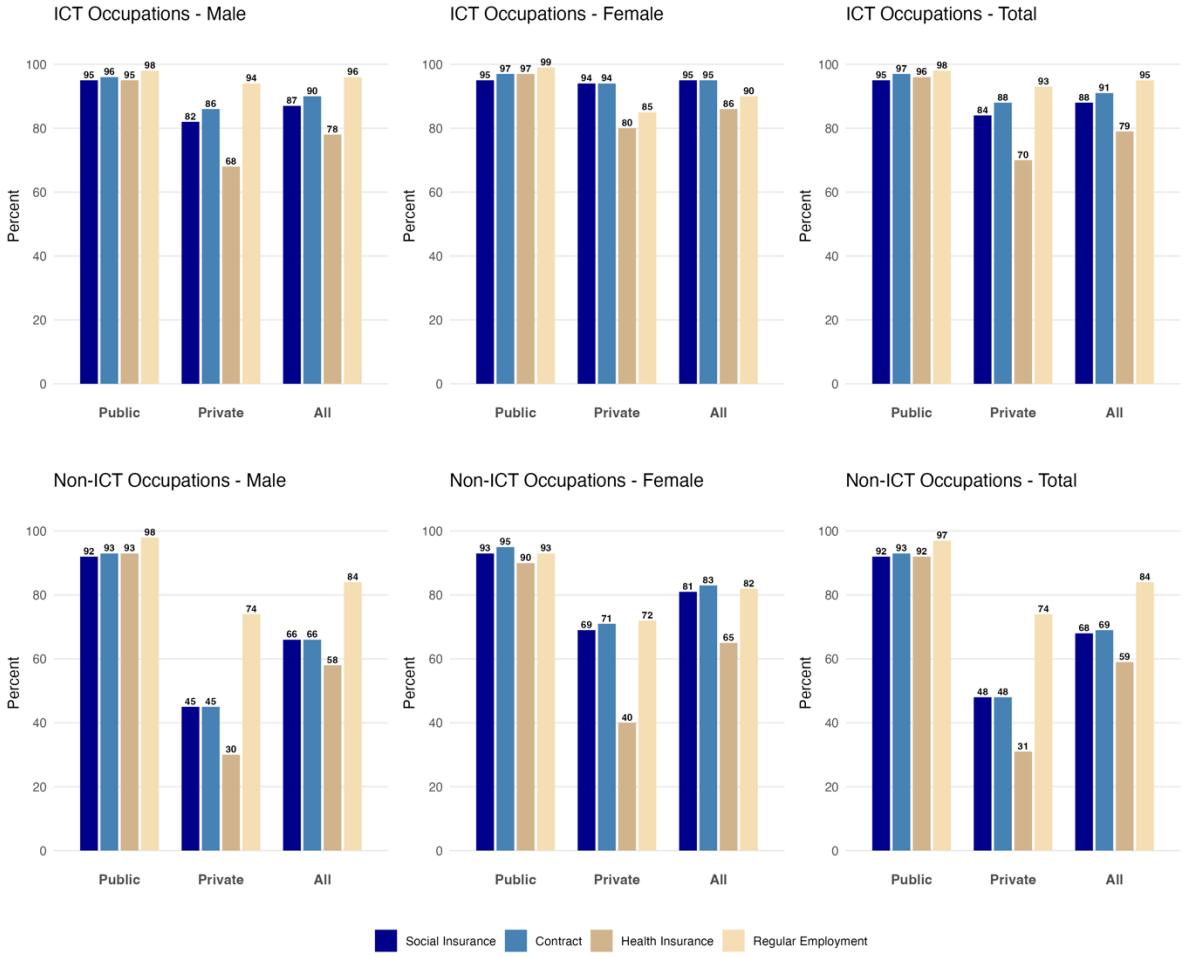
Source: Authors calculations based on JLMPS 2025

A4: Median monthly wages (JOD) by ICT job status and employment formality (private sector only), by gender (occupational and 3+ tasks definitions), ages 15-64, 2025



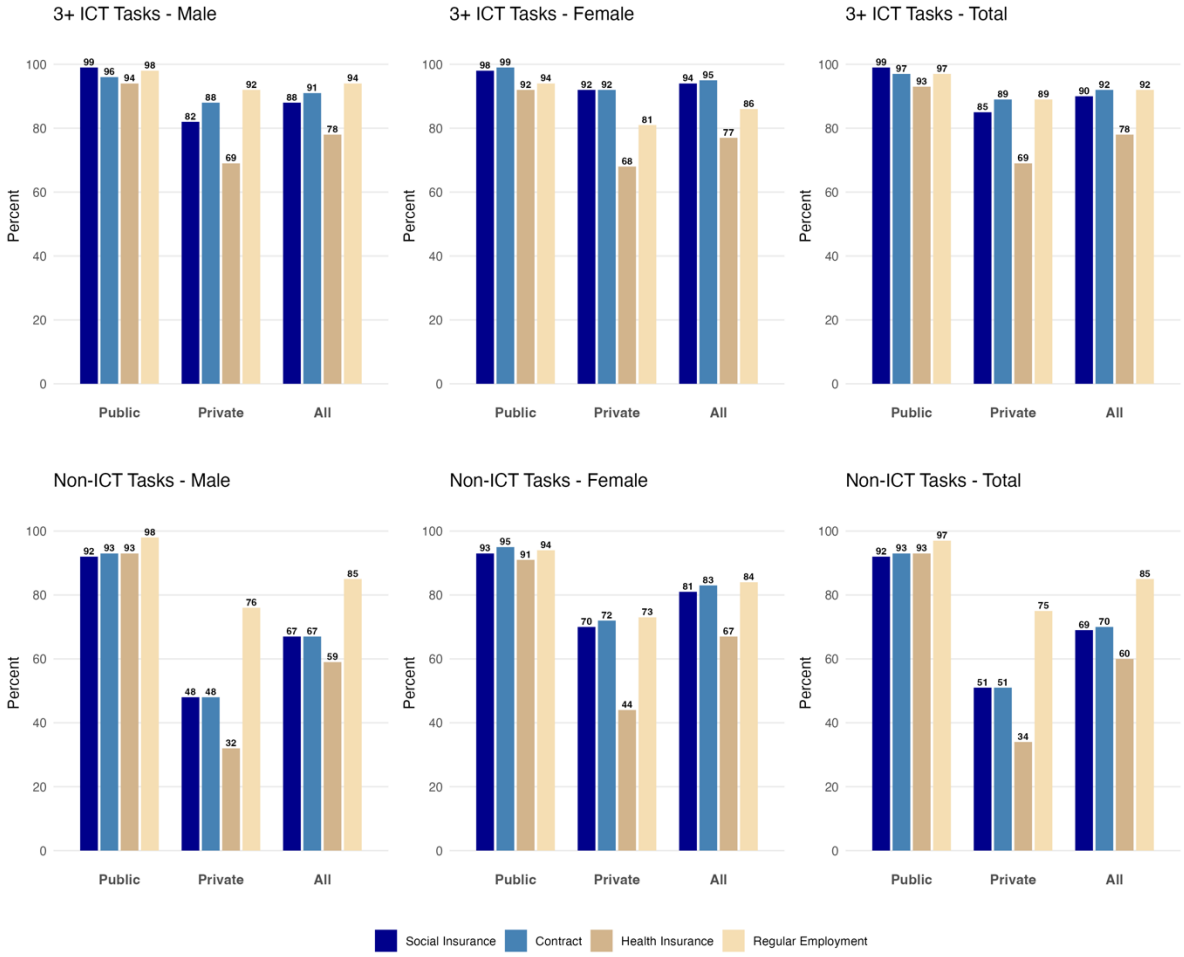
Source: Authors calculations based on JLMPS 2025

A5: Benefits by ICT job status, institutional sector and gender (occupational definition), ages 15-64, 2025



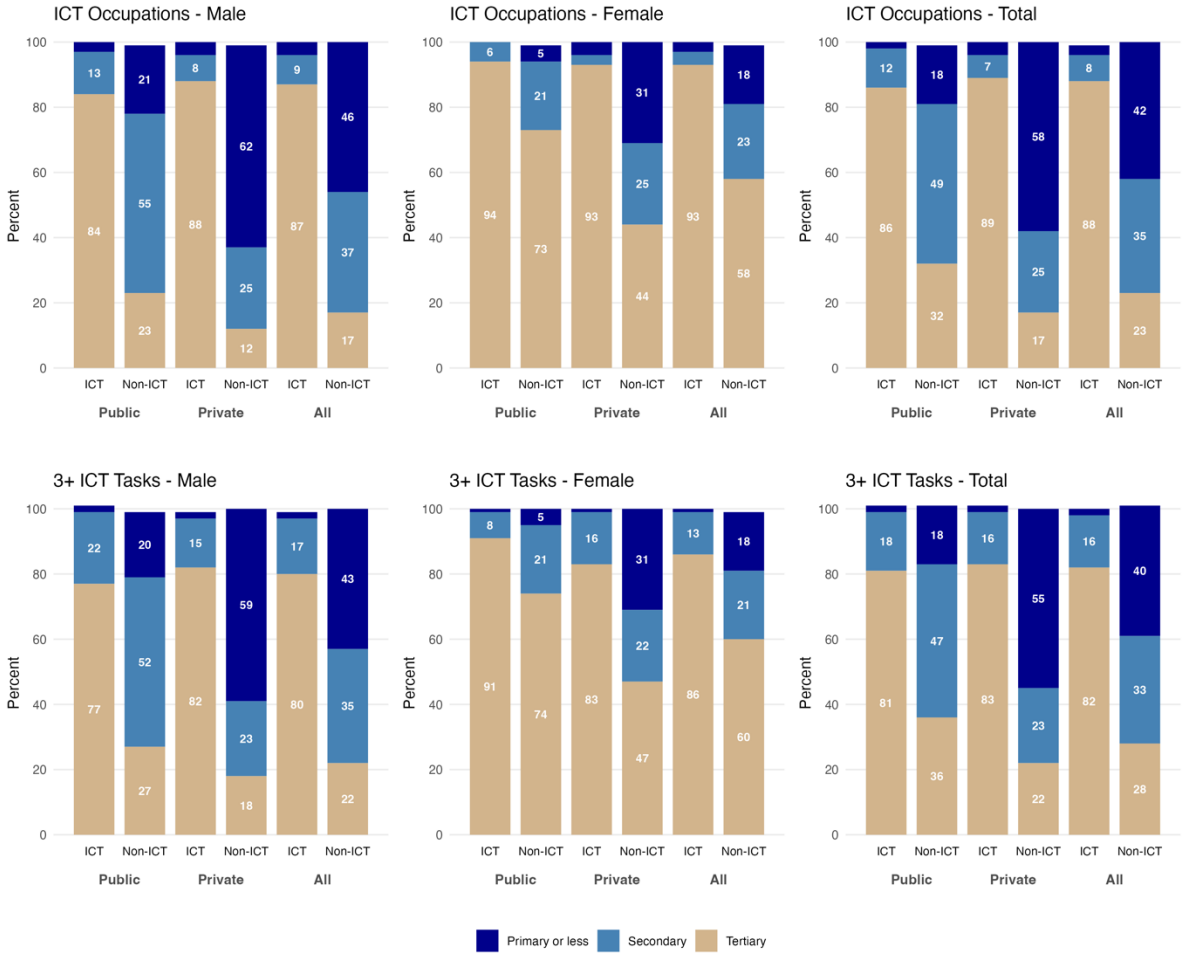
Source: Authors calculations based on JLMPS 2025

A6: Benefits by ICT job status, institutional sector and gender (3+ tasks definition), ages 15-64, 2025



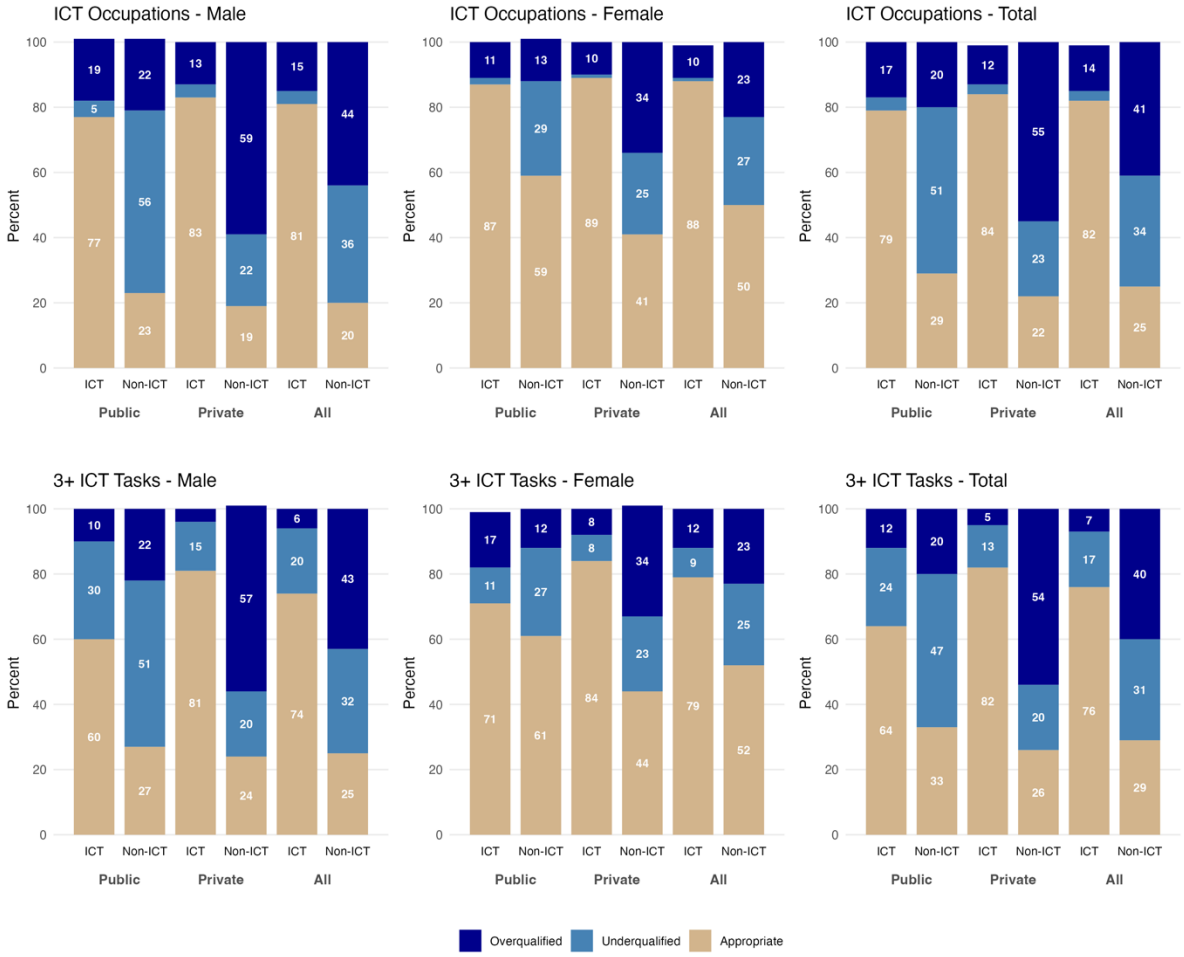
Source: Authors calculations based on JLMPS 2025

A7: Distribution of required education (in percentage) by ICT job status, institutional sector and gender (occupational and 3+ tasks definitions), ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025

A8: Educational matching by ICT job status (in percentage), institutional sector and gender (occupational and 3+ tasks definitions), ages 15-64, 2025



Source: Authors calculations based on JLMPS 2025