

Rapid Skills Needs Assessment



مؤسسة نهر الأردن
Jordan River Foundation

Monitoring, Evaluation and Learning Department

May 2023

Contents

| | |
|--|----|
| Skills Assessment Approach | 4 |
| Findings | 6 |
| More details about the mapping exercise for employers in different sectors | 24 |
| Summary, Conclusion and Recommendations | 28 |
| Annex I: Skills Assessment Tools | 34 |
| Annex II: List of Employers..... | 34 |

List of Acronyms

| | |
|-------|--|
| JRF | Jordan River Foundation |
| ILO | International Labor Organization |
| WBL | Work-based Learning |
| JCI | Jordan Chamber of Industry |
| NSSC | National Skills Sector Council |
| MEL | Monitoring, Evaluation and Learning |
| ICT | Information Computer Technology |
| MoDEE | Ministry of Digital Economy and Entrepreneurship |
| IT | Information Technology |
| AI | Artificial Intelligence |
| AWS | Amazon Web Services |
| TVSDC | Technical and Vocational Skills Development Commission |
| TwG | Technical Working Group |
| VTC | Vocational Training Centers |
| JREEF | Jordan renewable energy and energy efficiency fund |
| GDP | Gross domestic product |

List of Figures

| | |
|--|----|
| Figure 1: Group B companies' location | 23 |
| Figure 2: employer's disaggregation per governorate | 25 |
| Figure 3: Employers sector disaggregation..... | 25 |
| Figure 4 Required skills for the required and top priority occupations | 27 |
| Figure 5 Percentage of employers that implemented WBL programs | 28 |
| Figure 6 Skills gained by trainees through the WBL programs | 28 |
| Figure 7 Summery of main vacant occupations as recommended by employers..... | 29 |
| Figure 8 Summery of main occupations recommended by the NSSCs | 29 |
| Figure 9 mutual/common available and hard-to-fill occupations | 32 |

Introduction

The Jordan River Foundation (JRF) has partnered with the International Labor Organization (ILO) to implement “Promoting Work-based Learning programs for the host communities and Syrian refugees in Jordan” project. The project's goal is to implement a pilot initiative on Work-Based Learning (WBL) that facilitates youth’s transition to decent employment. In addition to building the capacity of training providers, the chambers and enterprise partners on designing and implementing quality Work-Based Learning programs, while assessing the Public-Private Partnership potential linkages to support the integration of the WBL into national and subnational development and sectoral planning. The project has two main outcomes:

1. Development of 10 WBL programs in market-relevant occupations, and
2. 350 trainees and job seekers from host communities and Syrian refugees trained on these 10 WBL programs.

JRF's interventions are designed to promote market-relevant skills for occupations in demand, aimed at bridging the skills gaps in targeted sectors. This is especially critical in a challenging economy with limited employment opportunities for skilled Syrian refugees and vulnerable Jordanians. The WBL project activities will be executed in Zarqa, Irbid, and Mafraq governorates.

As part of the WBL project, JRF conducted a rapid skill needs assessment, which included intensive consultations with key stakeholders, such as the Jordan Chamber of Industry (JCI), employers and employers’ organizations, in addition to national sector skills councils. The objective of the assessment is to identify the labor market supply and demand gaps -in productive and labor-intensive sectors, including but not limited to digital skills/occupations, construction and its sub-sectors, agriculture, and agro-food, with focus on green jobs, in order to identify occupations in demand and skills gaps in the targeted sectors, support productivity and competitiveness, identify available job vacancies, and enterprises/companies willing to implement and execute WBL programs in the different industries.

The rapid assessment aimed to answer several key questions, such as:

- What are the occupations/positions that are difficult to fill and the reasons behind?
- What are the most important occupations/work roles requiring TVET skilled personnel in targeted sectors?
- What are the required skills and qualifications for these top-priority occupations?
- Is there a need to recruit more workers in coming three months by the employers in the targeted sectors?
- Is your company interested in participating in the WBL program?

Additionally, the assessment presents findings from a mapping exercise of employers in the targeted governorates, collected through field visits, including the skills they value in employees, the types of training they provide to employees, and the occupations for which they were hiring at the time of the assessment (type and requirements).

The findings from the assessment will be used to identify the WBL programs based on the identified skills' gaps and promote the creation of sustainable employment opportunities for Syrian refugees and vulnerable Jordanians through the implementation of these programs.

Skills Assessment Approach

Phase (I) Development of Skills Assessment Tools

In developing the skills assessment tools, JRF conducted desk research of previous market assessments to identify the major drivers of success for the target group in the project, it also conducted several consultation meetings with different parties and stakeholders including ILO to identify the main questions to address through the assessment to lead to the exact desired results, in addition, JRF utilized its previous assessments lessons learned. Based on this, JRF devised a list of key questions to be at the top of the list of business owners and employers to identify the gaps and needs for the occupations required to operate their businesses efficiently.

As a result, JRF developed two separate tools; one for the employers, Skills Mapping Tool, and another for the National Sector Skills - Councils (NSSCs), ILO-WBL Tool. ILO reviewed and approved the tools; see Annex 1 for further information.

The skills mapping tool was used with potential employers to identify the sectors they are working in, number of vacancies available at their organizations, whether they have previously participated in similar programs, as well as the skills they require in new employees.

As for the ILO-WBL tool, it aimed to identify the top priority occupations in each sector, the required skills for each occupation, hard to fill positions in the sectors and the reasons of these difficulties, in addition to recommending stakeholders that may have interest in participating in this project.

Phase (II) Data Collection

After finalizing the tools, JRF collected data from a sample of mapped employers and the national skills sector councils, in addition to Jordan Chamber of Industry (JCI). The sample contained the following groups:

- **Group A- NSSCs:** Included 8 national sector skills -councils related to the Agriculture, Technology, Chemical- and Cosmetics -, Leather &Textile Industries, Construction, Logistics, Water and Energy, Tourism- and Hospitality sectors, in addition to reviewing the available literature of latest published skills assessment reports to support the NSSC and injecting other two sectors of the wood and furniture, and plastic industries. The interviewed NSSCs were the main source of information for the skills needs assessment exercise that highlighted the sectoral aspects, such as the top priority occupations (occupations that are in constant demand and it is important to have skilled employees permanently to cover these required jobs) needed and hard-to-fill positions (occupations that employers have difficulty covering them and to provide skilled employees who are able to fill these gaps more easily), the required skills for these positions, among others.¹

¹ Not all the top priority occupations are hard to fill and vice versa

- **Group B- Food processing factories:** Consisted of 9 agro-food companies under JCI's umbrella that ILO referred; these prospective factories were supported by ILO to enhance and promote their productivity and competitiveness. The factories were interviewed to better understand the main skills gaps in this sector, in addition to the possibility of them participating in the program and providing the skills needed for this sector.

Group C- Enterprises and businesses in different sectors: Comprised of 163 employers in the three targeted governorates (Irbid, Mafraq, Amman, Madaba, Balqa, and Zarqa) identified through a mapping exercise conducted in these locations and JRF's existing employers' database. The data was collected through interviews with employers, and simultaneously, the JRF team met with the NSSC for consultation.

The data collection process lasted for over one month and was subjected to several limitations, including:

1. **Coordinating interviews with interviewees:** the interviews with the sectors councils took longer time than anticipated to organize and agree on timing that suits each of the interviewees; as for the agro-food industry, the perception was to have a focus group discussion with all employers at a time; however, it wasn't possible due to lack of response from the chamber of Industry. Also, the lack of response led to the inability to meet the Plastic NSSCs.
2. **Limited sample size:** Due to time constraints and resource limitations for conducting the assessment in the targeted governorates only, the sample size for data collection was limited, and not all employers were targeted and interviewed, which makes it difficult to generalize the findings to the entire workforce or industry.

Phase (III) Data Analysis and Reporting

The purpose of the assessment is to answer the following questions:

The Rapid skills need assessment followed a mixed method approach using quantitative and qualitative tools and questions. The assessment started by defining the purpose and scope of the assessment, which included the objective to identify the labor market supply and demand gaps in the existing sectors which can offer opportunities for job seekers to establish a stable career path in specific occupations by following a roadmap of skills development and capacity building, the target audience including employers and business owners from different scales in addition to market associations and national skills sectors councils in close coordination with government entities, and the specific skills to be assessed whether technical, personal or life skills, this was followed by identifying the key stakeholders that need to be involved including the chamber of commerce, the national sectors skills councils, and employers from the respective sectors in the three targeted governorates and other governorates.

Findings

NSSCs are employer-led governance bodies tasked with leading skills development in their sectors. NSSCs are an effective mechanism that would allow employers and other stakeholders to contribute to devising skills policies and strategies, developing curricula, occupational standards, and national qualifications frameworks, and enhancing the overall relevance of the TVET sector. NSSCs also play a pivotal role in enhancing the quality and responsiveness of TVET and are expected to develop, manage, and maintain effective labor market information for the relevant sectors, improve the matching of supply to the demand for skilled labor force in the labor market, advocate for and contribute to improvements in the TVET sector, monitor and evaluate the progress and the results of training provision and productive employment of skilled workforce. Over the course of the past two years, thirteen NSSCs were established, four of them were established by with ILO support.

i. Information and Communications

The Information Communications and Technology (ICT) is one of the fastest growing sectors in Jordan's economy; despite the challenging economic environment, the ICT continues to stand as one of Jordan's greatest strengths and develops rapidly and always requires new skills and jobs due to continuous global development.

According to the study conducted by the International Trade Administration in 2021, The ICT saw growth of over 6 per cent during the pandemic and is a hotbed of entrepreneurship, with over 900 active companies employing over 22,000 people as data analysts, programmers, developers, engineers, artificial intelligence, cybersecurity, and more.²

Top Priority Occupations:

Based on the meeting with the respective NSSC, the top priority occupations identified in Jordan as a whole and in the targeted governorates are as follows:

- **Full-stack Developers:** who have the ability to work on both the front-end and back-end of web applications. They are proficient in multiple programming languages, databases, and web development frameworks, making them versatile and valuable to businesses in the technology sector.
- **Data Analysts and Data Scientists:** to help businesses analyze and make sense of large amounts of data.
- **Cloud engineers:** who have professionals responsible for any technological duties associated with cloud computing, including design, planning, management, maintenance, and support.
- **Programmers:** they play a critical role in designing, developing, and maintaining software applications and computer systems essential to businesses across different sectors.

The top priority occupations revealed by the interviews are in line with the study conducted by the Ministry of Digital Economy and Entrepreneurship (MoDEE) in 2022, where Cloud engineer, Cloud software engineer, Data analyst, and Application developer are mentioned as in demand digital skills roles, in addition to other occupations like information security analyst/ security analyst, analyst

² International Trade Administration, 2021, *Country Commercial Guide*, Jordan.

application security, computer network architect, solution architect, Business Analyst, Web and digital designer, and UI/UX Designer.³

Like many other countries, Jordan faces a gap in skills for occupations required in the IT sector. The fast-paced nature of technology means that there is a constant need for new skills and Expertise, and this can be a challenge for education and training providers to keep up with. Some of the key skills gaps in the IT sector and for the top priority occupations mentioned above include advanced programming languages, cloud computing, cybersecurity, data analytics, big data, and artificial intelligence.

The limited availability of skilled employees resulting from the gap between academic education and the needed skills and knowledge in the labor market created a set of hard-to-fill positions and accounts as the main reason for these vacancies.

Hard-to-Fill Positions

There are several hard-to-fill positions in the IT sector in Jordan due to the shortage of skilled professionals with the necessary Expertise. Some of the most challenging positions to fill based on the NSSC studies and recommendations sequentially include:

- **Cybersecurity Specialists:** As cybersecurity threats become more sophisticated, there is a growing demand for professionals who can protect computer networks and data from attacks. However, there is a shortage of cybersecurity specialists in Jordan with the necessary skills and experience to fill these positions.
- **Business Analytics:** a process of examining data and statistical models to draw insights and make informed decisions. It involves using tools and techniques to analyze and interpret data, such as data mining, predictive modeling, and statistical analysis. Business analytics can be applied to various business areas, including marketing, finance, operations, and customer service.
- **Full-stack Developers:** are highly skilled professionals who can work on both the front-end and back-end of web applications. However, there is a shortage of full-stack developers in Jordan with the necessary skills in multiple programming languages, databases, and web development frameworks.
- **Cloud Computing Specialists:** With the increasing use of cloud-based technologies, there is a growing demand for professionals who can develop, deploy, and manage cloud-based systems and applications. However, there is a shortage of cloud computing specialists in Jordan with the necessary cloud architecture, deployment, and management skills.
- **Artificial Intelligence (AI) and Machine Learning Specialists:** As businesses increasingly rely on AI-powered solutions, there is a growing need for professionals who can develop and implement these solutions. However, there is a shortage of AI and machine learning specialists in Jordan with the necessary skills in programming languages, algorithms, and statistical models.

In the study of Skills for Green and Digital Transition and Employment in Jordan published by the ILO in 2023, part of the occupation with greatest demand are in line with what was mentioned by the interviewees, including app developers, computer programmers, software developers, as well as data processors and analysts.⁴

Required skills for the hard-to-fill positions:

³ Ministry of Digital Economy and Entrepreneurship, 2022, *digital skills supply and demand gap analysis*, Jordan.

⁴ ILO, 2023, *Skills for Green and Digital Transition and Employment in Jordan*.

The required skills for hard-to-fill positions in the IT sector depend on the specific job role. However, in general, some of the most important skills for IT positions in Jordan include the following:

- **Programming Languages:** A strong understanding of programming languages such as Java, Python, JavaScript, and C++.
- **Web Development:** Proficiency in web development languages such as HTML, CSS, and JavaScript is also essential.
- **Database Management:** Understanding database management systems such as MySQL, Oracle, and Microsoft SQL Server.
- **Cloud Computing:** Experience with cloud computing platforms such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform is increasingly important for many IT roles.
- **Cybersecurity:** Knowledge of cybersecurity concepts, tools, and best practices is essential for cybersecurity and network security roles.
- **Project Management:** Strong project management skills, including timelines, budgets, and resources.
- **Communication Skills:** Effective communication skills, both verbal and written with good English language, are essential for IT professionals to collaborate with team members, clients, and stakeholders.
- **Problem-Solving Skills:** IT professionals must be able to analyze problems and develop effective solutions, often under tight deadlines and high-pressure situations.

These skills are aligned with the ILO and MODEE studies, where it was mentioned that most ICT graduates lack the skills required to transition into the labor market, including soft skills, such as leadership, communication and proficiency in English, as well as hard technical skills like web-development and programming.⁵

Other comments

- No National Occupational Standards (NOS) currently exist in this sector, but TVSDC is working on designing one that focuses on digital skills per occupation.
- Amman has over 900 small ICT companies that directly employ individuals, indicating a significant potential for job creation in the technology industry.
- JRF team requested the technology sector representative to nominate individuals who could support them in designing TWG as vocational instructors, but the representative noted that it's challenging to find IT professionals who aren't in large companies or YTJ and are willing to collaborate.
- The technology sector representative expressed an interest in participating in the WBL project by hosting trainees.

Conclusion

The results of the desk study and the NSSC recommendations indicate that there is a demand for ICT, there are positions that are hard to fill, and there is a shortage of skilled employees. The majority of these positions were for Full-stack Developers, Data Analysts and Scientists, Cloud Engineers, and Programmers.

However, the majority of ICT employers are concentrated in Amman, where they seek out employees who are qualified and skilled in addition to having a university degree.

⁵ ILO, 2023, *Skills for Green and Digital Transition and Employment in Jordan* / Ministry of Digital Economy and Entrepreneurship, 2022, *digital skills supply and demand gap analysis*, Jordan.

ii. Administrative and support service activities

The tourism in Jordan is an important part of the country's economy and will continue to play a crucial role in the country's development in the coming years, and as per the action plan of the Ministry of Environment (2021-2025), the sector has played an important role in the economic growth of Jordan, the tourism sector alone accounting for 12.5% of GDP in 201, and in the same year, it accounted for 7.3% of total employment in the Jordanian economy and the Government expects this figure to reach 8.4% by 2028, with the sector contribution to GDP rising to 22.3% in 2027⁶. During the COVID-19 pandemic, and due to the significant impact on the tourism industry in Jordan, the government has implemented various measures to support the industry, including financial support for hotels and tour operators, as well as the implementation of health and safety measures to protect both visitors and locals, this support has resulted into creating job opportunities which are faced by lack of interested and skilled workforce.

Top priority occupations and hard-to-fill positions:

Jordan's hotel and tourism sector employs a wide range of professionals in different occupations. Here are some of the priority occupations in the hotel and tourism sector in Jordan:

- Housekeeper
- Barista
- bartender

These occupations are essential to operating Jordan's hotels, resorts, and other tourism-related businesses. Each role is critical in ensuring visitors have a positive experience and that the business runs smoothly.

Hard-to-fill positions:

The occupations above are also considered hard to fill positions for several reasons, including the culture and stigma and the lack of means of transportation to the resorts and hotel locations in some tourist areas in Jordan.

Required skills:

The tourism and hotel sector in Jordan requires a diverse range of technical and interpersonal skills. Here are some of the key skills required for various roles in the tourism and hotel sector in Jordan and to fill the hard-to-fill positions:

- **Communication Skills:** The ability to communicate effectively with guests, colleagues, and management is essential in the tourism and hotel sector.
- **Customer Service Skills:** Providing excellent customer service is vital in this sector, and the ability to handle complaints and difficult situations with patience and tact is essential.
- **Language Skills:** As Jordan is a popular destination for tourists from all over the world, proficiency in one or more languages, such as English, Arabic, French, or Spanish, can be highly beneficial.

The communication skills, and the English language proficiency are also mentioned as required skills for the sector by the ILO study and mentioned also by the employers in the mapping exercise .⁷

⁶ Ministry of Environment, 2020, *Green Growth National Action Plan 2021-2025*.

⁷ ILO, 2023, *Skills for Green and Digital Transition and Employment in Jordan*

Other comments:

- The representative of the tourism sector pointed out the difficulty of implementing the WBL program in the targeted areas through the tourism and hotel sector unless people are living in those areas willing to work in Amman. He suggested alternative areas such as the Dead Sea, Ma'an, Petra, Aqaba, and Wadi Rum that could facilitate the WBL program through the Tourism and Hotel Sector Council.
- The representative emphasized the need for the sector to develop skills development strategies and provide professional training to beneficiaries, especially at the skill level, with a minimum of 160 hours of training and a professional practice certificate from TVSDC. Many training providers, such as Luminus, Ammon, and Marka Institute for Training in Tourism and Hotels, can offer such training.
The president expressed interest in joining the WBL project and hosting more than 200 trainees. He also mentioned that each training program in this sector must be planned for a minimum of 6 months' duration for the ability to master the profession by the trainers.

Conclusion

Around 20 employers were interviewed in different fields such as hotels, restaurants, and travel and tourism Companies, and they were interested to host trainees and offered around 120 available vacancies in a hard to fill occupations.

The hard-to-fill and top-priority occupations from an employer's point of view were resulted in three occupations:

- Data entry
- Sales and marketing
- House keeping

In addition to having expertise in this sector, the employers also highlighted the need for both soft/personal skills and vocational/technical skills, with the most important skills such as: Communication Skills, Language Skills, Computer skills, and Customer service.

In conclusion, it is worth mentioning that the housekeeping has been identified from all interviewed parties (employers, business owners, and NSSC), which indicates the high demand available.

iii. Agriculture; forestry and fishing

Jordan's agriculture sector is one of the Kingdom's most competitive sectors that is experiencing strong growth and has doubled its contribution to Jordan's national GDP from 2.0% to 5.5 % in the past five years. The significant growth is primarily driven by domestic demand and demand in the Middle East and North Africa (MENA) region, to which Jordan has direct market access. With its modern production technology, multiplicity, and diversity of products with high technical specifications, and quality standards offered in local and international markets, a variety of lucrative investment opportunities are present in Jordan's Agriculture sector.⁸

⁸ Ministry of Agriculture sector profile: [Agriculture-Sector-Profile-24-4.pdf \(moin.gov.jo\)](#)

Based on the NSSC's interview, it was stated that the agricultural sector inherited with different factors that make it an under-recognized sector by the workforce in Jordan, given the lack of decent work conditions including the low financial return on workers, neither social security nor the unconsidered women's related work conditions. It is also worth mentioning that in comparison to existing jobs and the labor market, there is an increasing number of university graduates in various specializations of the agricultural sector, including plant protection, plant production, animal production, nutrition and manufacturing, and so on.

Top Priority occupation:

The agricultural sector in Jordan is one of the most important sectors which includes many occupations, and the top priority occupations from NSSC point of view are:

- Palm cultivation and pollination.
- Hydroponics.
- Fish farming.
- Traditional fruit tree cultivation.
- Vegetable cultivation (seasonal cultivation requires workers).
- Beekeeping honey industry.

Hard to fill positions:

The agriculture sector faced an issue with the lack of skilled and professional workers and due to this there are a hard to fill positions with high demand in Jordan shows below:

- Engineers and technicians specializing in palm cultivation and pollination.
- Workers in packaging and staging.

Required skills:

The required skills for positions in the agriculture sector may vary depending on the specific role as for the hard-to-fill positions mentioned above, some common skills that are generally required and mentioned by the interviewed NSSC and employers include:

- Technical experience in plant production and familiar with pest and disease control
- Palm pollination techniques and skills.
- Experience in planting and fertilizing operations.
- Seriousness and commitment at work.

Conclusion

The employers listed the requirements needed for the positions that were mentioned as hard to fill including both technical and personal skills, such as:

- discipline and work under pressure
- Having the ability to manage bees
- Palm pollination techniques

Furthermore, 30 farms and enterprises were interviewed in the agriculture sector and offered more than 1300 opportunities for several hard-to-fill positions as shown below:

- Gardeners and Pickers

- Beavers
- Planting and harvesting dates.
- Palm cultivation
- Palm pollination

In conclusion, there are four occupations that align with both the employer and NSSC recommendations as well as the available positions: 1. Gardeners and Pickers 2. Beavers 3. Palm cultivation 4. Palm pollination

iv. Transportation and storage

The logistics in Jordan plays an important role in the country's economy, providing a crucial link between the country's producers, consumers, and international markets. The sector encompasses various activities: transportation, warehousing, distribution, and supply chain management. The sector generally faces the challenge of the gap between education and market demand when it comes to logistics and supply-chain positions.

Top priority occupations:

The logistics in Jordan employs a wide range of professionals in different occupations. The types of occupations are different based on the sub-sector, where the sub-sector of air cargo/air freight is the most challenging in terms of finding a suitable and skilled workforce. Air freight/air cargo in Jordan is an important component of the country's logistics and transportation sector, providing a fast and efficient mode of transport for goods to and from Jordan. Jordan's strategic location at the crossroads of Asia, Europe, and Africa and its modern air cargo facilities make it an attractive destination for air freight services. The top priority occupations are:

- **Cargo Security Officer:** Responsible for ensuring the safety and security of cargo throughout the transportation process, including conducting security checks and inspections.
- **Air Cargo Customs Clearance Agent:** Responsible for ensuring that all necessary customs clearance procedures are completed for imported and exported goods.
- **Cargo Documentation Specialist:** Responsible for preparing and maintaining all cargo-related documentation, including bills of lading, air waybills, and customs documentation.

Hard-to-fill positions:

In the air freight/ air cargo industry, certain occupations may be harder to fill due to a variety of factors, such as the required skills and qualifications, the working conditions, and the location. In Jordan, some of the hard-to-fill occupations in the air freight industry sequentially may be the positions listed above:

- Cargo Security Officer
- Air Cargo Customs Clearance Agent
- Cargo Documentation Specialist

Required skills:

The required skills for positions in the air freight industry may vary depending on the specific role and the company; as for the hard-to-fill positions mentioned above, some common skills that are generally required and mentioned by the interviewed NSSC include:

- **Strong Communication Skills:** Clear and effective communication skills are crucial in the air freight industry, as employees need to communicate with customers, suppliers, and other stakeholders regularly, and in both languages.

- **Attention to Detail:** Even small errors can have significant consequences in the air freight industry. Therefore, employees in this industry need to have a keen eye for detail to ensure that all cargo is handled, transported, and delivered safely and efficiently.
- **Time Management:** The air freight industry is often time-sensitive, and employees must manage their time effectively to ensure cargo is delivered on time.
- **Knowledge of Regulations:** Air freight regulations can be complex and vary depending on the destination country. Employees in this industry need to have a solid understanding of these regulations to ensure that all cargo is transported legally and safely.
- **Problem-Solving:** The air freight industry can present various challenges, from logistical issues to mechanical failures. Employees in this industry need to be able to identify and solve problems quickly and effectively.
- **Physical Ability:** Some roles in the air freight industry, such as cargo handling agents, may require physical labor. Therefore, employees in these roles need to be physically fit and able to lift heavy loads, and they need to be aware of the safety and health procedures.
- **Computer Literacy:** Many tasks in the air freight industry involve using computers, such as tracking cargo, generating documentation, and communicating with customers.

Therefore, employees in this industry need to have basic computer skills and be comfortable using industry-specific software.

When reviewing the EDU Syria report of Jordanian Labor Market Needs published in 2021, the identified skills above were in line with the critical skills needed in the sector, which are the English language, Computer skills, Logistics technical skills, problem solving, customer services and Safety and health (Edu-Syria, 2021).

Other comments:

- The president expressed interest in joining the WBL program.

v. CONSTRUCTION SECTOR

The construction sector is a significant contributor to the economy of Jordan, accounting for a significant portion of the country's GDP. The sector includes a wide range of activities, including building Construction, civil engineering, and infrastructure development.

The sector faces several challenges, including a shortage of skilled workers, a lack of access to financing, and a competitive market. However, the sector continues to grow and presents significant opportunities for businesses and investors in Jordan.

Top priority occupations:

The following are some of the top priority occupations for the construction sector as reported by the sector council:

- **Construction Workers:** Construction workers perform various tasks on construction sites, including digging trenches, pouring concrete, and installing insulation. They must be physically fit and able to work in a variety of weather conditions.
- **Plasterer:** a skilled tradesperson specializing in applying plaster to walls, ceilings, and other surfaces as part of the construction process. Plasterers are in high demand in Jordan for residential and commercial construction projects.

- **Electricians:** Electricians are responsible for installing and maintaining electrical systems in buildings and other structures. They must be able to read blueprints, install wiring, and troubleshoot electrical problems.
- **Plumbers:** Plumbers are responsible for installing and maintaining plumbing systems in buildings and other structures. They must be able to read blueprints, install pipes, and troubleshoot plumbing problems.

Hard-to-fill positions:

The top priority positions mentioned above are also reported to be the sequentially hard-to-fill positions in the sector. Which, in summary, are:

- Electricians.
- Plumbing
- Construction work
- plastering

Required skills:

Construction workers are skilled laborers who perform a wide range of physical and manual tasks on construction sites. They work alongside architects, engineers, and other construction professionals to build and maintain structures. Some of the skills needed for construction workers working for the hard-to-fill positions above include:

- **Physical Fitness:** Construction work is physically demanding and often involves lifting heavy materials and equipment. Construction workers need to be physically fit and able to work in a variety of weather conditions.
- **Knowledge of Safety Procedures:** Construction workers must be aware of safety procedures and regulations to ensure a safe work environment. They must be able to use safety equipment and follow safety protocols to avoid accidents.
- **Technical Skills:** Construction workers need to be skilled in using tools and equipment, such as power drills, saws, and hammers. They must be able to operate heavy machineries, such as bulldozers and cranes, and be able to read and interpret blueprints and schematics.

Other comments:

- The integration of science and technology in Construction is essential and can lead to the use of construction machinery, creating opportunities for women.
- To promote construction mechanization, the National Building Council could implement regulations and legislation in tenders, such as mandating mechanical processes.
- The representative emphasized the need for skilled Jordanian workers and expressed interest in participating in these projects. Furthermore, starting during Ramadan is not an issue.

Conclusion

A total of 30 employers were interviewed and showed interest in WBL programs also offered around 50 available vacancies in their companies, the employers located in the governorates of Irbid, Mafraq, and Amman. All these vacancies were spread across two main occupations and this collected between the NSSC's guidelines and employers' recommendations utilize in-demand and hard to fill occupations, such as electricians and construction workers.

vi. MANUFACTURING SECTOR

- **Renewable Energy:**

The water and energy⁹ sector faces an issue that leads the companies inside this sector to have a demand and lack of job opportunities centered on the lack of legislation that will help them to create new jobs, where the current situation in Jordan is that the sector doesn't have the ability to expand their business because of taxes and frequent requirements for alternative energy installation, which is also aligned with the ILO published study which indicates that Jordan's Green Entrepreneurs Network highlight serious challenges with project implementation. Investment opportunities have been limited by inadequate government support, absence of concise legislation and difficulties faced in the licensing process¹⁰. Moreover, from here, the top-priority occupations and hard-to-fill positions are identified clearly.

Top priority occupations:

Jordan is a country with limited natural resources, particularly in the water and energy sectors. Therefore, the government of Jordan has prioritized the development of these sectors to meet the growing demand for water and energy. Some of the top priority occupations in the water and energy sector in Jordan include:

- **Operation and maintenance (O&M) for solar photovoltaic (PV) systems:** an essential aspect of ensuring solar power projects' long-term performance and profitability. O&M for solar PV systems involves the regular monitoring, inspection, and maintenance of the components of a solar PV system, including the solar panels, inverters, batteries, and other electrical and mechanical components.
- **Solar off-grid system specialist:** a professional specializing in designing, installing, and maintaining solar power systems that are not connected to the grid. Off-grid solar systems are typically used in remote locations or areas without access to a reliable grid connection. There is a growing demand for solar off-grid systems specialists in Jordan as the country seeks to expand access to electricity in remote areas.
- **Energy efficiency experts:** As Jordan seeks to reduce its reliance on imported energy, there is a growing demand for energy efficiency experts who can help businesses and households to reduce their energy consumption. They are responsible for identifying energy-saving opportunities and developing strategies to reduce energy consumption.
- **Solar pumping systems specialist:** A professional specializing in designing, installing, and maintaining solar-powered water pumping systems. In Jordan, solar pumping systems specialists are in high demand as the country faces water scarcity and seeks to develop sustainable water management practices.

In addition to the occupations and functions above, specialist in Battery Storage Technologies, EV charging, and heat pump systems.

Hard-to-fill positions:

In summary, Jordan's water and energy sector is projected to keep expanding in the upcoming years, resulting in the emergence of numerous job opportunities for skilled and proficient professionals. The priority positions stated earlier are also deemed to be the most challenging to fill within the sector, based on the NSSC's suggestions. These positions are, in sequence:

⁹ NSSC of Water and Energy Sector

¹⁰ ILO, 2023, *Skills for Green and Digital Transition and Employment in Jordan*
Page 15 of 42

- Operations and maintenance
- A solar off-grid system
- Energy efficiency
- Solar pumping systems
- EV charging and heat pumps

Required skills for hard-to-fill positions:

The solar energy sector in Jordan is growing, creating many job opportunities for professionals with the necessary skills and Expertise. Some of the required skills for the hard-to-fill occupations in the solar energy sector based on the NSSC studies and recommendations sequentially include:

- **Technical Skills:** Professionals in the solar energy sector require technical knowledge of solar power systems, including solar panels, inverters, batteries, and other components. They should be able to troubleshoot and diagnose problems, perform maintenance and repairs, and install new systems.
- **Analytical Skills:** Analytical skills are essential for optimizing solar power systems and identifying areas for improvement. Professionals in the solar energy sector should be able to analyze data and make informed decisions based on that data.
- **Communication Skills:** Communication skills are essential for working with clients, contractors, and other stakeholders. Professionals in the solar energy sector should be able to explain technical concepts in plain language and communicate effectively with people from diverse backgrounds.

It's worth mentioning that the sector skills council of water and energy has implemented many projects which led them to achieve success stories through VTC in partnership with the German-Jordanian Center of Excellence for solar energy (In Mafraq), Royal Scientific Society and the Jordan Renewable energy & energy efficiency fund (JREEF). On the Other hand, one of the major challenges in this sector is informality and short-term employment as work tends to be seasonal and project-based, so skilled staff are retained for a period of a few months to deliver specific installation or maintenance projects, as opposed to being able to rely on permanent employment.¹¹

Other comments:

- The water and energy skills sector representative expressed concerns about potential unemployment for employees and undergraduate students. Despite job opportunities in the storage system, there is no legislation, and to address the issue, the TVSDC and the Ministry of Energy and Mineral Resources must develop rules and laws on enterprise licenses as well as taxes and fees.
- Private-sector employers struggle with government taxes and may have to lay off workers. A specific and clear vision, strategic plan, and objectives are needed to tackle these challenges.
- The representative expressed an interest in participating in the WBL project by hosting trainees. Starting the project during Ramadan is not an issue.

¹¹ ILO, 2023, *Skills for Green and Digital Transition and Employment in Jordan*

Conclusion

based on interviews with employers, they mentioned the top priority occupation and the needed skills from their point of view and their occupations were Operation and maintenance (O&M) for solar photovoltaic (PV) and Solar pumping.

if we return to the NSSC guidelines, we can see how these points of view meet up with the labor demand. Also, they highlighted the required skills for these occupations:

- Technical Knowledge
- Computer skills
- Communication Skill
- Interacting with equipment.

Again we can see Consensus among the recommendations which give us an indicator to reach the demand in these occupations and skills

In conclusion, the two following occupations should be considered based on the recommendations and their compatibility:

- Operation and maintenance (O&M) for solar photovoltaic (PV)
- Solar pumping

- **Garment industries - Leather &Textile Industries**

Jordan has a well-established textile and garment industry, with many textile and clothing factories in various industrial zones. The industry benefits from Jordan's strategic location, allowing access to regional and global markets easily. On the other hand, the leather industry is more focused on high-end footwear and leather goods production, with several established brands based in Jordan, with the majority of workers being foreigners (EDU-Syria, 2021).

The textile industry includes the Production of clothing, home textiles, and industrial textiles, while the leather industry includes the Production of footwear, leather goods, and tanning.

Top priority occupations:

The top priority occupations in the textile industry were classified into:

- **Seamstress:** a multi-skilled tailor who usually works with the fabrics, seams, and hemlines
- **Cutting Technicians** are also an important occupation in the textile industry in Jordan. They are responsible for cutting fabric into the required shapes and sizes for the Production of textile products, such as clothing, curtains, and bedding.
- **Production line workers.**
- **Quality Controller:** is responsible for ensuring that textile products meet the required quality standards. They inspect products at various stages of the production process, from raw materials to finished goods, and identify any defects or issues that need to be addressed.
- **Operating knitting machines:** Operators of Knitting Machines must be skilled in operating and the maintenance work of the different types of knitting machines, such as circular knitting machines.
- **Manager/supervisor:** A production manager/supervisor oversees the manufacturing process, ensuring that products are produced efficiently, on time, and to the required quality standards. They are responsible for managing the production team and meeting production targets.

Hard-to-fill positions:

Some of the hard-to-fill positions in the textile industry in Jordan based on the NSSC studies and recommendations sequentially include:

- **Quality Control Inspectors:** Quality control inspectors ensure that textile products meet the required quality standards. These positions require attention to detail and a thorough understanding of quality control processes, which can be difficult to find in the labor market.
- **Textile Designers:** Textile designers are responsible for creating designs for textiles and fabrics. These positions require creativity and technical knowledge, which can be difficult to find in the labor market.
- **Tailoring:** there may be a shortage of skilled tailors for specific types of tailoring work. For example, there may be a higher demand for tailors with Expertise in specialized techniques or for tailors who can produce high-end or custom clothing.

In the Jordanian Labor Market Needs assessment conducted in 2021, the hard jobs to fill are in line with what was reported by the NSSC as top priority and hard to fill occupations which were machine maintenance, cutters, and quality control. There was also a mention of the saturate jobs in this sector which were scarification, and Clothing packaging.

Required skills:

The required skills for occupations in the textile industry in Jordan can vary depending on the specific job role, but some general skills that are often required include:

- **Technical skills:** Many jobs in the textile industry require technical skills, such as machine operation, pattern-making, sewing, and embroidery. Workers must be proficient in using various types of equipment and tools, including sewing machines, cutting machines, and computer-aided design (CAD) software.
- **Attention to detail:** Quality is a critical aspect of the textile industry, and workers must have a high level of attention to detail to ensure that products meet quality standards and specifications.
- **Problem-solving skills:** Workers in the textile industry must be able to troubleshoot problems and find solutions to issues arising during production. This may involve identifying and fixing equipment malfunctions, adjusting patterns, or finding alternative materials.
- **Communication skills:** Effective communication is essential in the textile industry, particularly for roles that involve collaboration with other workers or departments. Workers must be able to communicate clearly and effectively with colleagues, supervisors, and customers.
- **Creativity:** Many jobs in the textile industry, such as textile design and product development, require high creativity and innovation. Workers must be able to generate new ideas and develop unique designs that meet customer needs and preferences.
- **Time-management skills:** The textile industry is often fast-paced and deadline-driven, and workers must manage their time effectively to meet production schedules and delivery deadlines.

Most of these skills come in line with the findings of the Jordanian Labor Market Needs in garment industries in Jordan recommendations, which mentioned that the Main skills needed to perform Jobs in the sector includes technical skills (knitting, sewing, tailoring, cutting, ironing), in addition to safety and personal hygiene, English language, interpersonal skills, Excel, problem solving skills. And customer service.¹²

Other comments:

¹² Edu-Syria, 2021, *Jordanian Labor Market Needs in Jordan*

- Regarding occupation standards, factories already have established standards that are regulated by the International Labor Organization (ILO).
- The representative emphasized the importance of ensuring that the WBL Program does not conflict with the National Employment Program, which has over 15,000 registered individuals in this sector. It is crucial to prioritize vocational occupations over management occupations and to ensure that all actions are in the best interest of Jordanian beneficiaries.
- The representative also mentioned the establishment of 32 productive branches, operating as a branch of a main factory in various districts such as Ajloun and Alhasa, providing employment opportunities for 8,500 Jordanian women.
- The president highlighted the need for a large number of skilled Jordanian workers who expressed interest in participating in such projects.

Conclusion

The JRF team met and visited several companies as part of the data collection process, and they highlighted the following top-priority occupations that required skills:

Top priority occupations were quality controlling, sewing, and workers in the textile sector and the required skills were Time-management skills, technical skills in sewing, working under pressure, and the ability to work in a production line. And here we can touch on the closeness in the requirements between NSSC and the employers.

A shortage of trained Jordanian workers was also mentioned, along with the importance of their necessity for this industry.

Four occupations related to this industry were suggested based on the triangulation of all the data sources and the data analysis.

1. Seamstress
2. Production line workers
3. Operating knitting machines
4. Tailoring

- **Chemical and Cosmetic Industries**

The chemical and cosmetic industries produce a wide range of products, including cosmetics, personal care products, household cleaning products, pharmaceuticals, and chemicals for industrial and agricultural use. During the sector council interview, it was mentioned that the main challenge that the sector faces is the inability of all vocational training facilities to provide the skills that are actually required in the industry including but not limited to equipment, tools, and expertise.

Top priority occupations:

The top priority occupations in the sector vary based on the sub-sector:

Sub-sector 1: Chemical detergent and disinfectant production is an important sub-sector within Jordan's chemical and cosmetics industry sector. The Production of chemical detergents and disinfectants involves using chemical reactions and specialized equipment to produce cleaning agents and disinfectants used in various settings, such as households, hospitals, and industrial facilities. Some of the top priority occupations in this sub-sector include:

- **Chemical engineers and chemists:** These professionals are responsible for developing and improving chemical processes and formulations for detergents and disinfectants. They use their technical knowledge to ensure that the products meet regulatory requirements and are effective.
- **Production workers:** Production workers operate the equipment used to manufacture detergents and disinfectants. They must have a good understanding of the manufacturing process and be able to operate and maintain equipment properly.

Sub-sector 2: Fertilizer and pesticide manufacturing is another important sub-sector within Jordan's chemical and cosmetics industry. Fertilizers and pesticides are essential for agriculture, and their Production involves complex chemical reactions and specialized equipment. Some of the top priority occupations in this sub-sector include:

- **Production workers:** Production workers operate the equipment used to manufacture fertilizers and pesticides. They must have a good understanding of the manufacturing process and be able to operate and maintain equipment properly.

In addition to the above, there's demand for the industrialization of dyes, paints, pigments, coatings, and inks.

Hard-to-fill positions:

Overall, Jordan's chemical and cosmetics industry faces a shortage of skilled workers with specialized technical knowledge and experience. The industry needs to invest in training and education programs to develop a qualified workforce and attract young people to pursue careers in this sector. The hard-to-fill positions in this industry based on the NSSC studies and recommendations sequentially are:

- Production manager/supervisor.
- Machine Maintenance Technician.
- Laboratory Technician.
- Chemicals Preparer

Required skills:

The required skills for occupations in Jordan's chemical and cosmetic industries vary depending on the specific job role. Still, some general skills that are often required include technical knowledge, attention to detail, problem-solving, communication, and time-management skills. In addition, many jobs in this sector require knowledge of regulatory requirements and compliance standards.

Other comments:

- The representative noted that several institutions have engaged in mapping processes without adequately considering professional standards, resulting in a lack of attention to important occupations such as production line operators.
- The representative expressed interest in participating in the WBL project and providing training opportunities, stating that the project could commence during Ramadan without issue.

Conclusion

Employers that were interviewed discussed the demand for workers in this field and the positions that were hard to fill. They also noted the following main occupations:

1. Line production workers for chemicals raw material
2. Machine Maintenance Technician.

In the hard-to-fill jobs, there will subsequently be a convergence in the requirement according to both the NSSC and employers, although no essential skills were recognized by the employers other than the limited experience in chemical manufacturing. In contrast to the NSSC, they included numerous skills.

And regarding to all of these recommendations and the research we have reached the following occupations:

1. Production workers
2. Machine operating and Maintenance Technician.

- **Manufacture of rubber and plastics products- Plastic industries**

Based on the Edu-Syria study in 2021 of the Jordanian Labor Market Needs and according to the ACI sectorial records, Jordan has about 260 large company shops and 800 small shops in the plastic industry employing over 9000 people. Adding to that, and similar to other industries, the plastic sector suffers from the lack of professional and technical employees such as the production line technicians. The study provided more details about the top priority occupation with high demand, hard-to-fill positions, skills requirements and the saturated jobs in the market.

Top priority occupations:

- Loading and unloading staff.
- Production staff.
- Housekeeping staff.
- Warehouse keepers.
- Counter sales.
- Quality auditors.
- Machine maintenance.
- Plastic extrusion technicians.
- Plastic injection technicians.

Hard-to-fill positions

For the hard-to-fill positions in the sector:

- Plastic extrusion technicians.
- Plastic injection technicians.

Required skills:

Similar to other sectors, the required skills for occupations in Jordan's plastic industries vary depending on the specific job role, and it includes the technical skills such as blowing, mixing, extrusion, molding, and palletizing, in addition to basic soft skills such as teamwork and seriousness of employees.

On a different note, there was a mention of the saturated jobs in the sector which were accountants, marketing, drivers and safety and security professionals.

Conclusion

15 call and meeting were conducted with plastic industries employers to know more about their recommendations in top priority and hard to fill occupations and the required skills for these occupations, the total outcomes were :

Hard to fill occupations:

- Production staff.
- Machine maintenance.

Most of the employers highlighted the importance of knowledge about the skills required to oversee and carry out technical operations, and from here we can consider these two occupations as recommended occupations from desk research and employers point of view.

- **Manufacture of wood and of products of wood**

Based on the Edu-Syria study in 2021 of the Jordanian Labor Market Needs and according to the ACI sectorial records, Jordan has about 100 large companies and over 2500 small shops operate in this sector, employing around 7000 employees. The main issue and challenge the sector faces is the low level of education of the majority of the sector's workers in general, which is affecting their etiquette and other personal skills like customer service. On the other hand, graduate employees only have the basics soft skills, and they usually lack technical knowledge, which insufficient to join the Labor Market in Jordan.

Hence, the professional training required for workers must include both basic and technical skills and should cover sufficient period of time. The study provided more details about the top priority occupation with high demand, hard-to-fill positions, skills requirements and the saturated jobs in the market.

Top priority occupations:

- Machine operators: Conventional (Saws, electric saws, compressors) or Computerized (CNC, NC, punching machine).
- Carpenter assistants.
- Cladding technicians.
- Business administration managers.
- Manual drilling technicians.
- Wood carving technicians.

Hard to fill positions:

One of the hard-to-fill positions in the Wood and furniture industry sector in Jordan is reported which is the skilled designers.

Required skills:

It will be an important requirement for workers in this sector to ensure specialization in their professions and to combine basic skills of attitude, seriousness, and ownership with the necessary technical skills such as Auto-cad, CNC machinery, interior design and painting.

Conclusion

Based on the Information that mentioned before and the demand in the labor, two main occupations were recommended

- Machine operators: Conventional (Saws, electric saws, compressors) or Computerized (CNC, NC, punching machine)
- Carpenter assistants

- **Manufacture of food products (AGRO-FOOD) COMPANIES**

The agro-food is an important industry in Jordan, accounting for a significant portion of the country's GDP and providing employment to many Jordanians. The sector includes all operations related to processing, preserving, preparing, and packaging agricultural and food products carried out in industrial production units.

The sector encompasses a range of activities, including agriculture, food processing, and distribution. As part of the skills mapping exercise, a number of the agro-food companies in Jordan were interviewed, and it was reported that the agro-food Sector in Jordan faces a number of challenges, including limited water resources, high production costs, and competition from cheaper imports. However, the sector also presents opportunities for growth, particularly through developing high-value crops and expanding exports to regional and international markets.

Companies' location:

The companies are divided into three governorates: Amman (6), Zarqa (1), and Balqa (2); as seen in Figure 1.

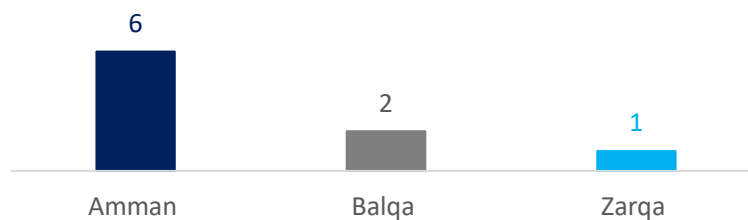


Figure 1: Group B companies' location

Top priority occupations and hard-to-fill positions:

In the agro-food Sector in Jordan, some positions are difficult to fill due to various reasons, such as the required skills and qualifications, the location of the job, and the working conditions. Some of the hard-to-fill positions in the agro-food sector, as reported by the interviewed companies sequentially include:

- Food production line workers (feeding raw materials into machinery, assembling goods on production lines, monitoring the process, testing product and packaging)
- Quality Officer
- Maintenance workers
- Operation and Logistics
- Download and upload workers
- Customer Service
- Engineers: (quality, Production, maintenance)
- Professional chefs
- Sales and marketing
- Food production workers

Required skills:

As stated above, the hard-to-fill positions in the agro-food in Jordan require individuals with specialized knowledge, experience, and skills. Here are some of the required skills for the hard-to-fill positions in the agro-food sector:

- Technical skills related to food production
- Problem-solving

- Ability to learn and train
- Communication skills,
- Safety Training
- Quality management
- Technical skills, especially in yogurt production
- Experience in handling food in production stages
- General hygiene

Other comments:

- During the interviews, it was found that many companies were not aware of the WBL program. However, once we explained the project to them, they expressed interest in hosting trainees and were ready to start. Additionally, most of them preferred to commence the training process after April 2023.
- In the interviews, some companies reported that they experienced a high turnover rate, and this was mainly due to the perception of the vocational occupations especially when it comes to difficulties and challenges when working in the sector. As an example, companies were forced to hire foreign workers because Jordanian workers were overwhelmed by the amount of work.

Conclusion

The Food production line workers was the most top priority occupation repeated and highlighted in the interviews and other research and I was recommended to be of WBL programs due to the demand in labor and the multiple skills that will be gained by the beneficiaries.

More details about the mapping exercise for employers in different sectors

A mapping exercise for employers in the three targeted governorates of Zarqa, Irbid, and Mafraq in addition to Amman, Madaba and Al-balqa was conducted as part of the assessment. The mapping process, which included 163 employers from different sectors, aimed to identify the types of training provided by employers, the skills they valued in trainees, and the occupations for which they have the opportunities to hire employees as they consider it in demand and/or hard-to-fill occupations.

Governorates

The employers were disaggregated into three governorates, Irbid (39), Amman (14), Zarqa (37), Balqa (2), Madaba (1) and Mafraq (70), as seen in Figure 2.

Figure 2: employer's disaggregation per governorate

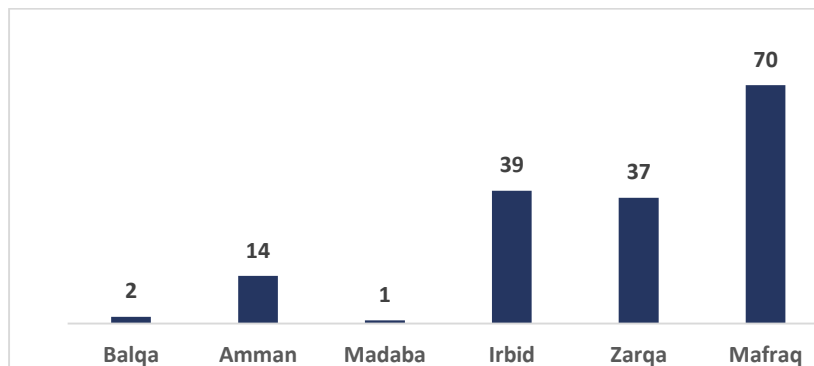


Figure 3: Employers sector disaggregation

| Sector | Sub-sector included | Examples |
|---|--|---|
| Manufacturing | Chemical and beauty industry | تصنيع أدوية، تصنيع دهانات، تصنيع منظفات |
| | Packaging and office supplies industry | شركات تعبئة و تغليف وتجهيز بضائع |
| | Manufacture of food products (AGRO-FOOD) COMPANIES | مطاعم، مخابز، مصنع ألبان، مصنع شوكولاته، مصنع معلبات وأغذية جاهزه |
| | Manufacture of wood and of products of wood | نجارين و محلات تصنيع و تصليح أثاث |
| | Plastic industry | شركة تصنيع أدوات منزليه بلاستيكيه شركة تصنيع علب المياه الصحية البلاستيكيه |
| | Garment industry | مصنع اليسة جاهزه محل خياطة و تصليح ملابس |
| | Renewable energy | شركات تركيب وصيانة الطاقة الشمسيه |
| | Mining and quarrying | شركة سحب الحديد شركة تصنيع ألواح الألمنيوم |
| | Engineering and electrical | شركة بيع و تصنيع اليااف زجاجية شركة تصنيع الكيبيلات الكهربائيه |
| Construction | Construction sector | محلات قص و تصنيع و بيع الرخام شركة الاسمنت الابيض |
| Administrative and support service activities | Services Sector | صالون تجميل مركز حرف يدوية صيانة سيارات |
| Administrative and support service activities | Tourism Sector | فندق، شركة سياحه و سفر |
| Transportation and storage | Transportation and storage sector | شركة شحن |
| Agriculture; forestry and fishing | Agriculture sector | مزارع نحل مزارع انتاج خضار و فواكه مزارع نخيل |

Top priority occupations per sector:

Importantly, the employers reported the available vacant occupations within their businesses, which were summarize in the bale below in the order of employers' priority based on their specific needs and demands.

| Sector | Sub-sector | Occupation type | Number of vacancies |
|--|--|--|------------------------------|
| Manufacturing Sector | Renewable energy | ○ Operation and maintenance (O&M) for solar photovoltaic (PV) | ○ 2 |
| | | ○ Solar pumping | ○ 5 |
| | | | |
| Manufacturing Sector | Chemical and beauty industries | ○ Production Line workers ○ Quality officers ○ Machine operators | ○ 16 ○ 5 ○ 27 |
| Manufacturing Sector | Manufacture of food products (AGRO-FOOD) COMPANIES | ○ Packaging and storing workers ○ dairy and cheese production ○ line food production workers ○ food production technician | ○ 17 ○ 48 ○ 102 ○ 5 |
| Manufacturing Sector | Plastic Industries | ○ Production staff. ○ Machine maintenance. | ○ 30 ○ 10 |
| Manufacturing Sector | Garment sector | ○ Tailor ○ Technicians | ○ 43 ○ 25 |
| Manufacturing Sector | Manufacture of wood and of products of wood | ○ carpenter ○ Machine operators | ○ 2 ○ 10 |
| Administrative and support service activities | Tourism Sector | ○ Data entry ○ Sales and marketing ○ House keeping | ○ 2 ○ 5 ○ 15 |
| Agriculture; forestry and fishing | Agriculture sector | ○ Gardeners and Pickers ○ Beavers ○ Planting and harvesting dates. ○ Palm cultivation ○ Palm pollination | ○ 1250 ○ 15 ○ 20 |

Clearly, the top priority occupations identified by the employers align with some of those mentioned by the relevant NSSCs for each sector¹³. In total, there are 2090 vacancies available in the market within the interviewed businesses/employers, and these include full-time jobs, seasonal jobs, and on-the-job trainings.

Required skills for the required and top priority occupations:

Employers often look for a combination of technical skills, soft skills, and physical abilities in some occupations when hiring new employees. Generally, employers value the work core skills such as the ability to work under pressure, commitment, respect, teamwork, good conduct, and flexibility. Technical

¹³ More details are included in the summery, conclusion and recommendation section.

and vocational skills varied depending on the type of work and training but included experience in machines operating, periodic maintenance, computer skills, and public safety.

Personal skills:



Technical skills:

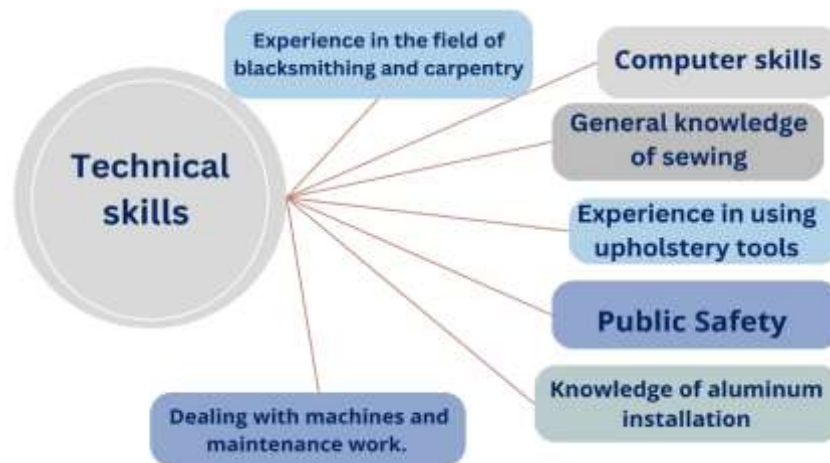


Figure 4 Required skills for the required and top priority occupations

WBL programs

Interestingly, 90% of the interviewed employers were interested in WBL programs and indicated a willingness to participate actively through the training programs implementation by hosting trainees’/job seekers in occupations that have difficulty to be filled or lack the required experience, and almost 71% of the employers already implemented different WBL programs previously to their employees before hiring, as seen in the figure below.

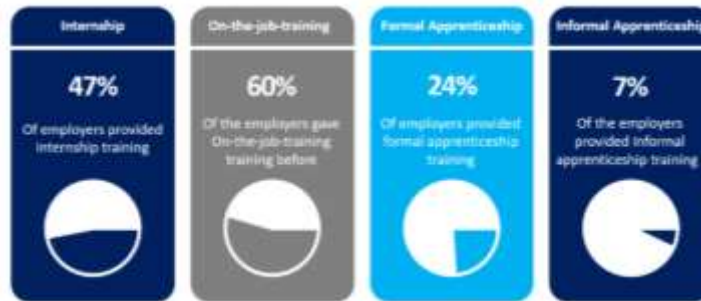


Figure 5 Percentage of employers that implemented WBL programs

And when employers were asked about the skills that the trainees gained after being enrolled in the WBL programs before hiring, the figure below shows the answers revolved around the following:

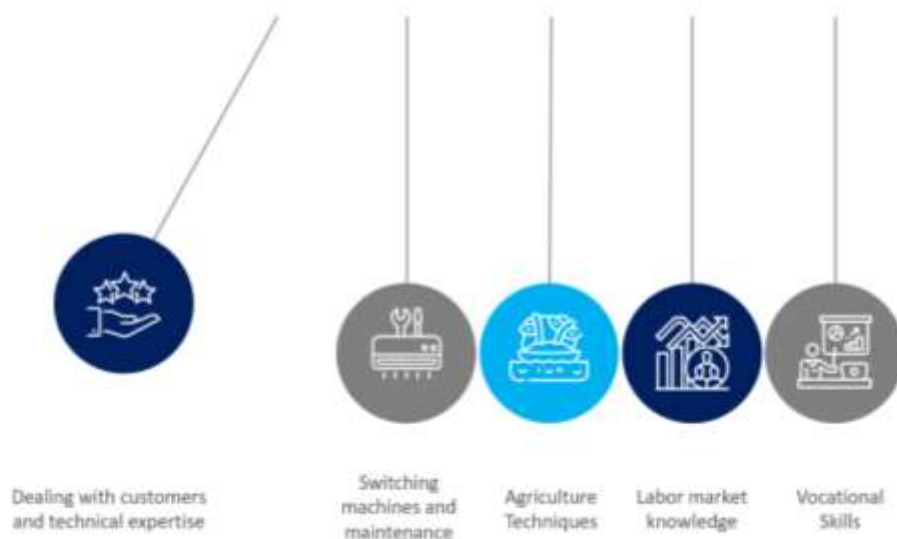


Figure 6 Skills gained by trainees through the WBL programs

In terms of duration of the WBL, the programs varied in duration between 3 to 6 months, and sometimes it exceeds the 6 months based on request from the trainees and capacity of employers

Summary, Conclusion and Recommendations

In summary, the NSSCs and the employers had a good understanding of the available vacancies in the labor market, as well as the necessary skills for each sector, which is presented in the tables below. To reach a decision and make a suggestion for the establishment of WBL programs in the chosen governorates, these results were compared to one another.

Figure 7 Summary of main vacant occupations as recommended by employers

| Sector | Sub-sector | Occupation type |
|---|--|---|
| Manufacturing Sector | Renewable energy Sector | <ul style="list-style-type: none"> ○ Operation and maintenance (O&M) for solar photovoltaic (PV) ○ Solar pumping |
| Manufacturing Sector | Chemical and beauty industries | <ul style="list-style-type: none"> ○ Production Line workers ○ Quality officers ○ Machine operators |
| Manufacturing Sector | Manufacture of food products (AGRO-FOOD) COMPANIES | <ul style="list-style-type: none"> ○ Packaging and storing workers ○ dairy and cheese production ○ line food production workers ○ food production technician ○ Gardeners and Pickers |
| Manufacturing Sector | Plastic industries | <ul style="list-style-type: none"> ○ Production staff. ○ Machine maintenance. |
| Manufacturing Sector | Garment sector | <ul style="list-style-type: none"> ○ Tailor ○ Technicians |
| Manufacturing Sector | Manufacture of wood and of products of wood sector | <ul style="list-style-type: none"> ○ carpenter ○ Machine operators |
| Administrative and support service activities | Services | <ul style="list-style-type: none"> ○ data Entry ○ laundry workers ○ Administrative |
| Administrative and support service activities | Tourism Sector | <ul style="list-style-type: none"> ○ Data entry ○ Sales and marketing ○ House keeping |
| Agriculture; forestry and fishing | Agriculture sector | <ul style="list-style-type: none"> ○ Gardeners and Pickers ○ Beavers ○ Palm cultivation ○ Palm pollination ○ Planting and harvesting dates |

Figure 8 Summary of main occupations recommended by the NSSCs

| Sub-sector | Available and hard-to-fill Occupations | Required skills | Availability of employers | Governorate |
|--|--|--|---------------------------|---|
| Information Communications and Technology Sector | <ul style="list-style-type: none"> ○ Full-stack Developers ○ Data Analysts and Data Scientists ○ Cloud engineers ○ Programmers ○ Cybersecurity Specialists. | <ul style="list-style-type: none"> ○ Programming Languages ○ Web Development ○ Database Management ○ Cloud Computing ○ Cybersecurity ○ Project Management. ○ Communication Skills ○ Problem-Solving Skills | Yes | <ul style="list-style-type: none"> ○ Amman |

| | | | | |
|--|--|---|---|--|
| Renewable Energy | <ul style="list-style-type: none"> ○ Operation and maintenance (O&M) for solar photovoltaic (PV) ○ Solar off-grid system specialist ○ Energy efficiency experts ○ Solar pumping systems specialist ○ EV charging and heat pumps | <ul style="list-style-type: none"> ○ Technical Knowledge ○ Analytical Skills ○ Communication Skill | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Mafraq ○ Zarqa ○ Amman |
| Tourism and Hospitality | <ul style="list-style-type: none"> ○ Housekeeper ○ Barista ○ Bartender | <ul style="list-style-type: none"> ○ Communication Skills ○ Customer Service Skills ○ Language Skills | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Irbid ○ Amman |
| Agriculture sector | <ul style="list-style-type: none"> ○ Gardeners and Pickers ○ Beavers ○ Palm cultivation ○ Palm pollination ○ Planting and harvesting dates | <ul style="list-style-type: none"> ○ Palm pollination techniques and skills. ○ Experience in planting and fertilizing operations. ○ Seriousness and commitment at work. | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Irbid ○ Mafraq ○ Balqa ○ Amman |
| Transportation and storage | <ul style="list-style-type: none"> ○ Cargo Security Officer ○ Air Cargo Customs Clearance Agent ○ Cargo Documentation Specialist | <ul style="list-style-type: none"> ○ Strong Communication Skills ○ Attention to Detail ○ Time Management ○ Knowledge of Regulations ○ Problem-Solving ○ Physical Ability ○ Computer Literacy | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Zarqa ○ Amman |
| Construction | <ul style="list-style-type: none"> ○ Electricians. ○ Plumping ○ Construction work ○ plastering | <ul style="list-style-type: none"> ○ Physical Fitness ○ Knowledge of Safety Procedures ○ Technical Skills | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Irbid ○ Mafraq ○ Zarqa ○ Amman |
| Garment industry (leather and textile) | <ul style="list-style-type: none"> ○ Seamstress ○ Production line workers ○ Cutting Technicians ○ Quality Controller ○ Operating knitting machines ○ Manager/supervisor ○ Textile Designers ○ Tailoring ○ | <ul style="list-style-type: none"> ○ Technical skills ○ Attention to details ○ Problem-solving skills ○ Communication skills ○ Creativity ○ Time-management skills | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Irbid ○ Mafraq ○ Zarqa ○ Amman |
| Chemical and cosmetics industry | <ul style="list-style-type: none"> ○ Chemical engineers and chemists ○ Production workers ○ Production manager/supervisor | <ul style="list-style-type: none"> ○ Attention to details ○ Problem-solving ○ Communication ○ time-management | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Irbid ○ Mafraq ○ Zarqa ○ Amman ○ |

| | | | | |
|--|---|--|---|---|
| | <ul style="list-style-type: none"> ○ Machine operating and Maintenance Technician. ○ Laboratory Technician. | | | |
| Plastic industries | <ul style="list-style-type: none"> ○ Loading and unloading staff. ○ Production staff. ○ Housekeeping staff. ○ Warehouse keepers. ○ Counter sales. ○ Quality auditors. ○ Machine maintenance. ○ Plastic extrusion technicians. ○ Plastic injection technicians. | <ul style="list-style-type: none"> ○ Blowing ○ Mixing ○ Extrusion ○ Molding ○ Palletizing ○ teamwork and seriousness | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Zarqa ○ Irbid ○ Amman |
| Manufacture of wood and of products of wood | <ul style="list-style-type: none"> ○ Machine operators: Conventional (Saws, electric saws, compressors) or Computerized (CNC, NC, punching machine). ○ Carpenter assistants. ○ Cladding technicians. ○ Business administration managers. ○ Manual drilling technicians. ○ Wood carving technicians. | <ul style="list-style-type: none"> ○ Attitude, seriousness, and ownership, ○ Auto-cad, ○ CNC machinery ○ Interior design ○ Painting | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Irbid ○ Mafraq ○ Zarqa ○ Amman |
| Manufacture of food products (AGRO-FOOD) COMPANIES (Agri-food) | <ul style="list-style-type: none"> ○ Food production line workers (feeding raw materials into machinery, assembling goods on production lines, monitoring the process, testing product and packaging) ○ Quality Officer ○ Maintenance workers ○ Operation and Logistics ○ Download and upload workers ○ Customer Service ○ Engineers: (quality, Production, maintenance) ○ Professional chefs ○ Sales and marketing ○ Food production workers | <ul style="list-style-type: none"> ○ Technical skills related to food production ○ Problem-solving ○ Ability to learn and train ○ Communication skills, ○ Safety Training ○ Quality management ○ Technical skills, especially in yogurt production ○ Experience in handling food in production stages ○ General hygiene | <ul style="list-style-type: none"> ○ Yes | <ul style="list-style-type: none"> ○ Irbid ○ Mafraq ○ Zarqa ○ Amman |

Conclusion and recommendations:

Comparing the available and hard-to-fill occupations reported by the NSSCs with the employers mapped and interviewed in the targeted governorates, the mutual/common available and hard-to-fill occupations sequentially are:

Figure 9 mutual/common available and hard-to-fill occupations

The occupations mentioned in the table below were classified based on ISCO classification

| Occupation | Sub-Sector | Certified occupation standards |
|--|---|---|
| Operation and maintenance (O&M) for solar photovoltaic (PV) | Renewable energy sector | - |
| Solar pumping | Renewable energy sector | - |
| Housekeepers | Tourism and hospitality | - |
| Seamstress | Garment industry (leather and textile) | خياط-متعدد-المهارات-معيار-مهني1.pdf (tvsvc.gov.jo) |
| Production line workers | Garment industry (leather and textile) | *FOR production line supervisor مشرف-الإنتاج-معيار-مهني.pdf (tvsvc.gov.jo) |
| Operating knitting machines | Garment industry (leather and textile) | خياط-متعدد-المهارات-معيار-مهني1.pdf (tvsvc.gov.jo) |
| Tailoring | Garment industry (leather and textile) | خياط-متعدد-المهارات-معيار-مهني1.pdf (tvsvc.gov.jo) |
| Production workers | Chemical and cosmetics industry. | *FOR production line supervisor المعيار-المهني-لمشرف-الإنتاج.pdf (tvsvc.gov.jo) |
| Machine operating and Maintenance Technician | Chemical and cosmetics industry. | معيار-مهني-فني-صيانة-الألات-2-21-2021.pdf (tvsvc.gov.jo) |
| Production staff | Plastic industry. | |
| Machine maintenance Plastic | Plastic industry. | |
| Food production line workers | Food and Agriculture sector | |
| Machine operators: Conventional (Saws, electric saws, compressors) or Computerized (CNC, NC, punching machine) | Manufacture of wood and of products of wood | |
| Carpenter assistants | Manufacture of wood and of products of wood | |
| Gardeners and Pickers | Agriculture sector | المعايير-المهنية-مزارع-حمضيات.pdf (tvsvc.gov.jo) |
| Beavers | Agriculture sector | |
| Palm cultivation | Agriculture sector | المعايير-المهنية-مزارع-نخيل.pdf (tvsvc.gov.jo) |
| Palm pollination | Agriculture sector | المعايير-المهنية-مزارع-نخيل.pdf (tvsvc.gov.jo) |

It is recommended that JRF forms WBL programs in collaboration with available employers in the targeted governorates in any of the above occupations, and to follow the occupation standards as per the TVSDC guidelines, and to advocate for the occupations which are not already covered in the standards.

Annex I: Skills Assessment Tools

Skills Mapping Tool: (tool that used to interview the employers)

[Skills Mapping Tool- Question Guide \(humanitarianresponse.info\)](http://humanitarianresponse.info)

- ILO – WBL tool (rapid need assessment tool, was used to interview the national skills councils and Agro-food companies)

[ILO WBL Tool \(humanitarianresponse.info\)](http://humanitarianresponse.info)

Annex II: List of Employers

| # | Name of Company | Sector | Subsector | Governorates | Training | Occupation | Remuneration | Social Security |
|----|---|---|--|--------------|-----------------------|--|---|-----------------|
| 1 | Pioneering chemical industries | Manufacturing sector | Chemical and beauty industries | Mafrqa | | | | |
| 2 | Balkan Industrial Company | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Zarqa | Internship On-the-job | Packaging products, line food production workers | transportation allowance | No |
| 3 | Al-Yamamah Company for manufacture of agricultural pesticides | Manufacturing sector | Chemical and beauty industries | Mafrqa | Internship | | No | No |
| 4 | Global Car Testing | Administrative and support service activities | Administrative and support service activities | Zarqa | | data entry | | |
| 5 | Abu Jamea Center for Hybrid Maintenance | Administrative and support service activities | Administrative and support service activities | Zarqa | | Electrical Engineers and assistants | | |
| 6 | Jordan Aluminum Extrusion Company | Manufacturing sector | Mining and quarrying Sector | Mafrqa | Internship | | No | No |
| 7 | Muhammad Jaffa Original Car Maintenance Center | Administrative and support service activities | Administrative and support service activities | Zarqa | Formal Apprenticeship | | Yes | No |
| 8 | Mr Hybrid Centre | Administrative and support service activities | Administrative and support service activities | Zarqa | Formal Apprenticeship | Auto mechanic technician | Yes | No |
| 9 | Retaj Pharmaceutical Company | Manufacturing sector | Chemical and beauty industries | Mafrqa | Formal Apprenticeship | | No | No |
| 10 | Frankfurt | Manufacturing sector | Mining and quarrying Sector | Mafrqa | On-the-job | line production workers | Housing and the company pays half of the salary | Yes |

| | | | | | | | | |
|----|---|---|--|--------|--|--|---|--------------------|
| 11 | Al Aysar Industrial Company | Manufacturing sector | Packaging and office supplies industry sectors | Mafraq | | | | |
| 12 | Jordan Center of Excellence for Solar Energy | Manufacturing sector | renewable energy | Mafraq | Formal Apprenticeship | | incentives and transportation allowance | No |
| 13 | Al-Ameen Foodstuff Trading Company | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | | Packaging products, upload and download | | |
| 14 | Labib Al-Fakhouri Pottery Factory | Manufacturing sector | Craft industry | Zarqa | Internship | | No | No |
| 15 | Rovan Food Industries Company | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | Formal Apprenticeship | line production workers in food processing | Yes | Yes |
| 16 | Rabieh bakeries | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Irbid | On-the-job | chef, food production workers | minimum wage | Yes |
| 17 | Jordan Aluminum Extrusion Company | Manufacturing sector | Mining and quarrying Sector | Mafraq | On-the-job | | Yes | Yes |
| 18 | Al-Zuhairi for checking cars | Administrative and support service activities | Administrative and support service activities | Zarqa | Informal Apprenticeship | operations and maintenance | transportation allowance | No |
| 19 | Anwar Al-Qatan Food Industries | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | Formal Apprenticeship | Packaging products, Pickers | transportation allowance and lunch meal | No |
| 20 | Arab Company for White Cement Industry | Manufacturing sector | Construction sector | Zarqa | Formal Apprenticeship | | transportation allowance | No |
| 21 | Golden Chemical Industries | Manufacturing sector | Chemical and beauty industries | Mafraq | Internship | | Yes | Yes |
| 22 | United Company for the manufacture of sulphochemical detergents | Manufacturing sector | Chemical and beauty industries | Mafraq | Formal and Informal Apprenticeship Internship On-the-job | | incentives and transportation allowance | Yes |
| 23 | The Industrial Gathering Company for the manufacture of sponges | Manufacturing sector | Manufacture of wood and of products of wood | Mafraq | Internship On-the-job | cutting workers, uploading and downloading, packing orders | depends on the programs | Yes |
| 24 | United Cable Industries Company (UCIC) | Manufacturing sector | Engineering and electrical sectors | Mafraq | On-the-job | line production workers | salary | Yes |
| 25 | Plastic pipe return factory | Manufacturing sector | Plastic industries | Zarqa | Formal and Informal Apprenticeship On-the-job | | transportation allowance | Yes, after 1 month |
| 26 | Enriching nature for the food and juice industries | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Zarqa | Internship On-the-job | packing products, quality control, Administrative | Yes | Yes |
| 27 | Ard Sumer for food industries and soft drinks | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Zarqa | Internship On-the-job | | Yes | Yes |
| 28 | Al Wefaq Logistics Project Management | Transportation and storage | Transportation and storage sector | Zarqa | | | | |

| | | | | | | | | |
|----|--|----------------------|--|--------|-----------------------|--|-----|-----|
| 29 | The first to recycle the carton | Manufacturing sector | Packaging and office supplies industry sectors | Zarqa | Internship On-the-job | site workers, line production workers, machine operators | Yes | Yes |
| 30 | Advanced company for paint technology | Manufacturing sector | Chemical and beauty industries | Zarqa | Internship On-the-job | | Yes | Yes |
| 31 | Jordanian company for the manufacture of pipes | Manufacturing sector | Mining sector | Zarqa | Internship On-the-job | Piping Systems Technicians, Line Operation Workers | Yes | Yes |
| 32 | The National Company for Steel Industry | Manufacturing sector | Mining sector | Zarqa | Internship On-the-job | Public Safety Engineer, workers | Yes | Yes |
| 33 | Al-Essawi Industrial | Manufacturing sector | Mining sector | Zarqa | Internship On-the-job | Technicians in Mechatronics, machine technicians, blacksmith | Yes | Yes |
| 34 | ideal for green buildings | Manufacturing sector | Construction sector | Zarqa | Internship On-the-job | Civil engineers, site workers | Yes | Yes |
| 35 | Soft cloths for the apparel industry | Manufacturing sector | Garment industry sector | Zarqa | Internship On-the-job | sewing | Yes | Yes |
| 36 | Arab Development Company for Food Industries | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | | food production Workers, quality engineers | | |
| 37 | Arabella Company | Manufacturing sector | Mining sector | Zarqa | Internship | line production workers | Yes | No |
| 38 | Mayas Al Shahbandar Roasters Company | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Zarqa | Internship On-the-job | | Yes | Yes |
| 39 | Al-Hattab Factory Company for Fiberglass | Manufacturing sector | Engineering and electrical sectors | Zarqa | Internship On-the-job | Electrical Workers / Technicians | Yes | Yes |
| 40 | Nashashibi and Abini company for models and stickers | Manufacturing sector | Packaging and office supplies industry sectors | Zarqa | Internship On-the-job | 3D Printing Engineer | Yes | Yes |
| 41 | Ahmed Al-Lala Company | Manufacturing sector | Mining sector | Zarqa | | | | |
| 42 | Al-Sahab Packaging Company | Manufacturing sector | Packaging and office supplies industry sectors | Zarqa | | engineer's workers | | |
| 43 | Al-Fakhr Company for Plastic Industries | Manufacturing sector | Plastic industries | Zarqa | | Electrical Technician | | |
| 44 | Saada Brothers Company for stone, marble and bricks | Manufacturing sector | Construction sector | Irbid | | Marble Cutting Technician, Workers | | |
| 45 | Montaser Muhammed Tariq | Manufacturing sector | Mining sector | Irbid | On-the-job | Installation Technician | Yes | No |
| 46 | Riyadh Foundation for Detergents | Manufacturing sector | Chemical and beauty industries | Zarqa | | Chemical Production, uploading and downloading products | | |
| 47 | Safety Palace for the manufacture of doors | Manufacturing sector | Manufacture of wood and of products of wood | Zarqa | Internship On-the-job | Blacksmith Assistant / Assistant Carpenter | Yes | Yes |

| | | | | | | | | |
|----|--|---|--|---|--|---|---|--------------------------------|
| 48 | Rich Pine International Group Inc | Manufacturing sector | Garment industry sector | Irbid | | sewing, line production workers | | |
| 49 | Modern grille | Administrative and support service activities | Administrative and support service activities | Mafraq | Formal Apprenticeship | Washing and ironing clothes | No | No |
| 50 | Global vehicle testing and valuation and technical support | Administrative and support service activities | Services | Mafraq | | Maintenance Technician | | |
| 51 | Ideal hotel services | Administrative and support service activities | Tourism | Irbid | Internship On-the-job Formal and Informal Apprenticeship | line production workers, downloading and uploading, entry-level workers | depends on the programs inside the NGOs | No |
| 52 | Montana Tours and Travels | Administrative and support service activities | Tourism | Irbid | On-the-job | data entry, tickets sales | No | No |
| 53 | Sham jewel | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Irbid | | food production | | |
| 54 | Nabasheer Training Academy | Administrative and support service activities | Administrative and support service activities | Irbid | Internship | . Embedded Systems Engineer . 3D Printing Engineer . Artificial Intelligence Programmer | No | No |
| 55 | Digital Center | Administrative and support service activities | Administrative and support service activities | Mafraq | Informal Apprenticeship | sales and marketing | Yes | No |
| 56 | Al Sarhan Bakeries | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | Formal Apprenticeship | Production of sweets and food | Daily Remuneration | No |
| 57 | Al Assaf Building Materials | Construction sector | Construction sector | Mafraq | On-the-job | | Daily Remuneration | No |
| 58 | Aaron Mobiles | Administrative and support service activities | Administrative and support service activities | Administrative and support service activities | On-the-job | | transportation allowance and free training course | No |
| 59 | Gasoline for car maintenance | Administrative and support service activities | Administrative and support service activities | Irbid | Internship | Car Maintenance and servicing | No | No |
| 60 | Mahmoud Al-Atrash Restaurant | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Zarqa | On-the-job Formal Apprenticeship | inside restaurant workers | intensives | No, except on the job trainees |
| 61 | Ibrahim El Sherman and his partner | Construction | Construction | Irbid | Internship | Solar Energy technicians | incentives and transportation allowance | No |
| 62 | Kinzi | Administrative and support service activities | Administrative and support service activities | Zarqa | On-the-job | worker | Yes | No |
| 63 | Thuraya constants | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | On-the-job | machine operations and maintenance, Mixing materials | No | No |
| 64 | Mas alsafi | Manufacturing sector | Garment industry sector | Mafraq | Internship | Administrative workers | salary | Yes |

| | | | | | | | | |
|----|--|---|--|--------|----------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| 65 | Rainbow for the production of clothing | Manufacturing sector | Garment industry sector | Mafraq | On-the-job | | salary | Yes |
| 66 | Oras Company for the manufacture of detergents | Manufacturing sector | Chemical and beauty industries | Irbid | On-the-job | Chemical Production | No | No |
| 67 | Awassi Dairy Factory | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | Formal Apprenticeship | Dairy production | No | No |
| 68 | Nalima faith in God for vegetables and fruits | Agriculture sector | Agriculture sector | Mafraq | Formal Apprenticeship | | Yes | No |
| 69 | Al Maeen Marketing and Distribution | Manufacturing sector | Packaging and office supplies industry sectors | Mafraq | Internship | | 8 JD per day | No, except who still after 14 days |
| 70 | Mafraq grocery store | Administrative and support service activities | Administrative and support service activities | Mafraq | | Cashier, workers | | |
| 71 | Obada alsawalaha for phones | Administrative and support service activities | Administrative and support service activities | Irbid | Formal Apprenticeship On-the-job | sales and maintenance | Yes | No |
| 72 | Noon for renewable energy | Manufacturing sector | renewable energy | Zarqa | On-the-job | Electrical Engineers and assistants | transportation allowance | No |
| 73 | Razan Tailor | Manufacturing sector | Garment industry | Irbid | Internship | sewing | Yes, If it was through organization | No, until employment |
| 74 | Dolma Restaurant | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Irbid | On-the-job | food production workers | No | No |
| 75 | aljazeera for poultry | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | Internship | | No | No |
| 76 | Marseille Investments | Administrative and support service activities | Administrative and support service activities | Irbid | On-the-job | games operators | Yes | Yes |
| 77 | Nasser Yaqoub Iron and Cement | Administrative and support service activities | Administrative and support service activities | Zarqa | On-the-job | | Yes | Yes |
| 78 | Ibtisam Radwan | Administrative and support service activities | Administrative and support service activities | Irbid | On-the-job | sales and workers | No | No |
| 79 | Golden hands for kitchens | Manufacturing sector | Manufacture of wood and of products of wood | Irbid | On-the-job | carpenter | Yes | Yes |
| 80 | Al-Salma Company for Food Industries | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Mafraq | | | | |
| 81 | Shaher Hassan Qirbaa Company | Manufacturing sector | Plastic industries | Irbid | | Iron extrusion | | |
| 82 | Kafr Abel for Water Technology | Manufacturing sector | renewable energy | Irbid | On-the-job | | Yes | No |
| 83 | Farhan Al Zoubi Restaurant | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Irbid | Internship | inside restaurant workers, chefs | Yes | No |
| 84 | Development and innovation | Manufacturing sector | Chemical and beauty industrys | Zarqa | | | | |
| 85 | Noureddine Dairy and Cheese | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Irbid | | | | |
| 86 | Altahona chicken | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Irbid | | | | |

| | | | | | | | | |
|-----|--|---|--|--------|----------------------------------|--|-------------------------|--------------------------|
| 87 | Palmyra Company for Plastic and Cardboard Industries | Manufacturing sector | Plastic industries | Irbid | | Technician in Mechatronics, machine technicians | | |
| 88 | Dadonia Factory (Al Saria) for plastic industries | Manufacturing sector | Plastic industries | Irbid | On-the-job | line production workers | Yes | Yes |
| 89 | Arabi Franji restaurant chain | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | Zarqa | Formal Apprenticeship On-the-job | inside restaurant workers | minimum wage | Yes |
| 90 | The future for phones | Administrative and support service activities | Administrative and support service activities | Zarqa | Internship | sales and marketing, maintenance | half salary | No |
| 91 | Abu Yamen Al Jarrah Carpentry | Manufacturing sector | Manufacture of wood and of products of wood | Irbid | | | | |
| 92 | Al Rousan Upholstery Workshop | Manufacturing sector | Manufacture of wood and of products of wood | Irbid | | | | |
| 93 | Miran beauty salon | Administrative and support service activities | Administrative and support service activities | Irbid | | | | |
| 94 | Hands on handicrafts | Administrative and support service activities | Administrative and support service activities | Irbid | Internship | | No | No |
| 95 | Global Fertilizer Technology Corporation | Manufacturing sector | Chemical and beauty industries | Mafraq | | production workers and maintenance | | |
| 96 | Al Fahd Factory for Marble, Granite, Tiles and Ceramics | Construction | Construction | Mafraq | | | | |
| 97 | Al-Ayeq Furniture | Manufacturing sector | Manufacture of wood and of products of wood | Mafraq | | | | |
| 98 | Nona Mafraq | Administrative and support service activities | Administrative and support service activities | Mafraq | Internship On-the-job Other | social media and sales | depends on the programs | depends on the agreement |
| 99 | abu shadi-abu sharib farm | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | | | |
| 100 | shammout farm | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | | | |
| 101 | Sohoul Al Olat For Agricultural Production Marketing Establishment | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | On-the-job-training | | | |
| 102 | al-ryan farm | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | | | |
| 103 | Al Soqoor Farm For Meat & Livestock Trading | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | packing products, storing products , production line | No | No |
| 104 | abu fadi albarqawi farm | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | | | |
| 105 | farm house | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | | | |
| 106 | dewik farm for cows | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | | | |
| 107 | Bab Al Hosn Farms for Birds and Poultry | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | | | |

| | | | | | | | | |
|-----|--|---|--|--------|----------------------------------|---|---|-----|
| 108 | ali alsadi farm | Manufacturing sector | Manufacture of food products (AGRO-FOOD) COMPANIES | | | Farm worker | No | No |
| 109 | solar square for renewable energy | Manufacturing sector | renewable energy | Irbid | •On-the-job-training | Energy Technician | Yes,100 | No |
| 110 | yousef kraes company for renewable energy | Manufacturing sector | renewable energy | Irbid | •On-the-job-training | | No | No |
| 111 | assawsanenh company for renewable energy | Manufacturing sector | renewable energy | Irbid | •On-the-job-training | | No | No |
| 112 | Awtar Renewable Energy & Energy Solutions | Manufacturing sector | renewable energy | Irbid | •Internship •On-the-job-training | Supervision of energy projects | Yes | No |
| 113 | ajyad Al Sharq Solar Energy Company | Manufacturing sector | renewable energy | Mafraq | | | | |
| 114 | TOPKAPI GENERAL CONTRACTING AND BUILDING MATERIALS COMPANY | Construction Sector | Construction Sector | Irbid | •Formal Apprenticeship | Gypsum, paint and tiles | 260 | No |
| 115 | muayad barkat company | Construction Sector | Construction Sector | Irbid | •On-the-job-training | Aluminum & Marble Technician | 100 | No |
| 116 | anwar al garaiba farm for marble and granite and ceramic | Construction Sector | Construction Sector | Irbid | | | | |
| 117 | alfawares company for aircondition and ventilation | Construction Sector | Construction Sector | Irbid | •Formal Apprenticeship | air conditioning and refrigeration Technician | No | No |
| 118 | al Sadiq Sanitary & Central Heating | Construction Sector | Construction Sector | Mafraq | •On-the-job-training | Loading and unloading , Sales, Sanitary extensions and painter | Yes | No |
| 119 | yousef Mohammed Abu Bakr Trading Establishment | Construction Sector | Construction Sector | Irbid | •Informal apprenticeship | Air conditioning and refrigeration | Yes | No |
| 120 | alfahed al aswad plastic Factory | Construction Sector | Construction Sector | Irbid | | | | |
| 121 | integrated Resources Company for Plastic Industries and Plastics | Manufacturing sector | Plastic industries | Mafraq | •On-the-job-training | | salary | yes |
| 122 | black Panther Plastic Factory | Manufacturing sector | Plastic industries | Zarqa | •On-the-job-training | | salary | yes |
| 123 | Days inn | Administrative and support service activities | Tourism Sector | Amman | •On-the-job-training | Waiter, maintenance workers, receptionist, gym Coach, Lifeguard Swimmer | Transportation allowance for partial training or full salary for junior employees | yes |

| | | | | | | | | |
|-----|--|---|-------------------------|--------|----------------------------------|--|--|-----|
| 124 | Amman international hotel | Administrative and support service activities | Tourism Sector | Mafraq | | Chef, steiwer, food preparations | | |
| 125 | fairmount amman | Administrative and support service activities | Tourism Sector | Amman | •Internship •On-the-job-training | Receptionist, Catering, Housekeeping, Cook Assistant | transortation allowance | No |
| 126 | movenpick hotel amman | Administrative and support service activities | Tourism Sector | Mafraq | | Hospitality, Receptionist, Room Administrative and support service activities | | |
| 127 | kempinski hotel amman | Administrative and support service activities | Tourism Sector | Mafraq | •Internship •On-the-job-training | Bellboy, Reception, Cleaning, Room Service and Housekeeping, Hospitality and Catering, Cafeteria | transortation allowance | No |
| 128 | international company for plastic indutries | Manufacturing sector | Plastic industry sector | Mafraq | •On-the-job-training | accounting | certificate s, promotions, salary increase | Yes |
| 129 | safe techno plastic company | Manufacturing sector | Plastic industries | Amman | •On-the-job-training | Packaging Officer, Machine Operator | yes 260salary | No |
| 130 | Ahmed Khreisat Poultry Marketing Establishment | Administrative and support service activities | Tourism Sector | Mafraq | | | | |
| 131 | North Deer Farm | Agriclture sector | Agriclture sector | Mafraq | | | | |
| 132 | hashem alnaser citrus farms | Administrative and support service activities | Tourism Sector | Amman | | agriculture engineers, Farmers | | |
| 133 | Abu Rashad Salibi Farms | Agriclture sector | Agriclture sector | Irbid | | | | |
| 134 | shaaban Citrus Farm | Agriclture sector | Agriclture sector | Amman | | | | |
| 135 | al sharif farms | Agriclture sector | Agriclture sector | Mafraq | | | | |
| 136 | carpentry with machines Haroun Tirawi | Administrative and support service activities | Tourism Sector | Mafraq | •Internship | Specialized in installing kitchens, bedrooms and doors | yes | Yes |
| 137 | areej elsham restaurant | Administrative and support service activities | Tourism Sector | Mafraq | •Internship •On-the-job-training | cleaners, chef, cashier | No | Yes |
| 138 | lucca steakhouse-tendori | Administrative and support service activities | Tourism Sector | Mafraq | | | | |
| 139 | advanced Omrania Plastic Industries | Manufacturing sector | Plastic industries | Mafraq | •On-the-job-training | Manufacture of plastic tanks Plastic pipes | minimum Salary | Yes |
| 140 | apiaries of Tawakol Abu Sharif | Administrative and support service activities | Tourism Sector | Mafraq | | | | |
| 141 | geneva hotel | Administrative and support service activities | Tourism Sector | Amman | •Internship •On-the-job-training | Security Officer, Waiter, Room Service | transortation allowance | Yes |
| 142 | honey Bracelet Establishment for Bee Products | Administrative and support service activities | Tourism Sector | Amman | •Informal apprenticeship | | No | No |
| 143 | kempinski hotel aqaba red sea | Administrative and support service activities | Tourism Sector | Mafraq | •Internship •On-the-job-training | Hospitality, cleaners, chiefs | yes | Yes |

| | | | | | | | | |
|-----|---|---|--------------------|--------|---|--|--------------------------|-------------------------------------|
| 144 | aqaba coast hotel | Administrative and support service activities | Tourism Sector | Mafraq | | | | |
| 145 | al Younis Poultry Establishment | Agriculture sector | Agriculture sector | Mafraq | •Internship | | yes | Yes,if the employee stay in the job |
| 146 | bani Kinana Beekeepers Association | Agriculture sector | Agriculture sector | Mafraq | •On-the-job-training | Beavers | yes | Yes |
| 147 | tallinn Travel & Tourism | Administrative and support service activities | Tourism Sector | Amman | •On-the-job-training | Translator Italian to English | monthly salary | Yes |
| 148 | apiaries of the believer | Administrative and support service activities | Tourism Sector | Mafraq | | | | |
| 149 | nabulsi honey apiaries. | Administrative and support service activities | Tourism Sector | Mafraq | | | | |
| 150 | jordan river foundation | Administrative and support service activities | Tourism Sector | Mafraq | •On-the-job-training | housekeepers | yes | No |
| 151 | plastic World Company for Construction Industries | Manufacturing sector | Plastic industries | Mafraq | | Loading and uploading workers | | |
| 152 | acacia travel jordan | Administrative and support service activities | Tourism Sector | Mafraq | •On-the-job-training | Marketing for trips, reception and ticketing | monthly salary | Yes |
| 153 | olive forest farms | Agriculture sector | Agriculture sector | Mafraq | | | | |
| 154 | philadelphia travel agency | Administrative and support service activities | Tourism Sector | Mafraq | •On-the-job-training | Tickets & Hotel Reservations | monthly salary | Yes |
| 155 | Hattab factory for plastic bags | Manufacturing sector | Plastic industries | Amman | | Packaging workers | | |
| 156 | Jana for Dates | Agriculture sector | Agriculture sector | Amman | •On-the-job-training | | No | No |
| 157 | Al Khair Dates Farm | Agriculture sector | Agriculture sector | Balqa | | Planting and harvesting dates | | |
| 158 | Jordan Banks Dates | Agriculture sector | Agriculture sector | Balqa | | Planting and harvesting dates | | |
| 159 | opal hotel amman | Administrative and support service activities | Tourism Sector | Amman | •Internship •On-the-job-training | | | Yes |
| 160 | Sheraton Amman Al Nabil Hotel | Administrative and support service activities | Tourism Sector | Amman | •Internship •On-the-job-training •Formal Apprenticeship | | Transportation allowance | No |
| 161 | Capri Hotel Suites | Administrative and support service activities | Tourism Sector | Amman | •On-the-job-training | | Full Salary | No |
| 162 | Grand Hotel Madaba | Administrative and support service activities | Tourism Sector | Madaba | •On-the-job-training | | No | Yes |
| 163 | Retaj hotel | Administrative and support service activities | Tourism Sector | Amman | | | No | |