Study 2023

Labor Market Conditions and Workers' Needs in the Jordanian Agricultural Sector -Roadmap



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Introduction

Jordan's agricultural sector is grappling with significant challenges, largely attributed to its harsh geographical and climatic conditions. This sector is constrained by limited arable land and a scarcity of water resources, which in turn adversely affects the working conditions of farmers.

These workers often contend with inadequate social protection, low wages, rights violations, extended work hours, and instances of unpaid wages. Additionally, the sector's labor force faces a multitude of economic, health, and legal challenges that impede their ability to achieve a decent standard of living, thereby impacting the agricultural labor market and threatening the sector's sustainability over the long term.

Despite these challenges, Jordan has made significant strides in adopting modern and sustainable agricultural techniques, aimed at boosting productivity and diversifying crop production.

This study is designed to provide an insightful exploration of the working conditions within the agricultural sector, particularly focusing on how these conditions are intertwined with the aforementioned environmental and resource challenges. It delves into a comprehensive analysis of labor dynamics, occupational health and safety concerns, and the regulatory framework governing agriculture. Additionally, the study incorporates viewpoints from both the agricultural workers and farm owners. Adopting a human rights-based approach, the study critically examines the agricultural sector, aiming to bring to light key farmer issues and advocate for improved policies that uphold human rights within Jordan's agriculture. The study pays special attention to the effect of current labor practices on worker rights in key agricultural regions such as Mafraq, the Jordan Valley, Irbid, and Zarqa. It also considers the interplay between human rights dynamics and the economic realities of Jordan's agricultural production, especially in relation to labor conditions.



Methodology

The research team utilized a comprehensive mixed-method approach, combining both quantitative and qualitative elements, to align with the specific goals of the study. This encompassed a thorough review of various studies, literature, relevant and statistical indicators, and both international and national reports, focusing particularly on the agricultural sector's national strategies and labor market dynamics in Jordan. To gather quantitative data, two distinct surveys were developed: one targeting a sample of 407 agricultural workers, and the other aimed at 94 farm owners, with participants selected from diverse regions including the Jordan Valley, Mafraq, Irbid, and Zarqa.

A series of twelve targeted focus group discussion sessions were organized across these regions, involving both workers and farm owners. These sessions were geographically and demographically segmented. In the Central Jordan Valley, separate sessions were held for male and female workers. This pattern was replicated in the Northern Jordan Valley, Irbid, and Zarqa. The final two sessions were uniquely structured for farm owners in the Northern Jordan Valley and Zarqa. To complement these discussions, twelve detailed interviews were conducted with key stakeholders involved in agricultural labor. Interviewees included experts from the Independent Union of Agricultural Workers, the Ministry of Water and Irrigation, and Agricultural Engineers Association, offering a diverse range of perspectives on the subject matter.



An Overview of Jordan's Agricultural Sector

The small farms dominate the agricultural sector in Jordan, where the area of 96% of the farms is less than 100 dunams ¹. This leads to the fragmentation of agricultural production and consequently a decrease in productivity and an increase in production costs. However, the last two decades have seen structural changes within the organization of agricultural production, with small family-owned projects gradually being replaced by larger farms for commercial purposes.

In Jordan, there are a total of 2.12 million dunams of cultivated land. The area for field crops and grains is 964,000 dunams, while the land used for growing vegetables and fruits is 374,000 and 784,000 dunams, respectively. The area of forests is about one million dunams, while grazing land is 8.5 million dunams². There are 35,000 animal production facilities, and the number of livestock is 3.862 million heads, including approximately 77,000 cows, 3 million sheep, 765,000 goats, and 10,000 camels³.

Due to the ongoing diverse difficulties faced by the agricultural sector, whether for workers or farm owners, reports indicate a decrease in employment in the agricultural sector over the past years. In 2000, there were about 163,000 officially registered workers in the agricultural sector, which decreased to 75,000 workers in 2016, with an average annual decline of 1.7%. During this period, the number of Jordanian workers decreased from 63% of the total agricultural workforce to 30% ⁴. In the second quarter of 2023, the proportion of workers in the agriculture sector was 3.3% of the workforce, with 1.4% being Jordanian ans and 5.5% non-Jordanians ⁵.

The agricultural sector is unattractive to Jordanian workers, which may be attributed to difficult working conditions, low wage rates, and the absence of a social protection umbrella for the sector ⁶. According to the General Statistics Department's 2022 figures, the net number of new jobs in the agricultural sector does not exceed 1,149, accounting for 2.7% of the total jobs created by the Jordanian economy in the same year ⁷. The percentage of skilled workers in the sector is 1.8% for males and 0.3% for females ⁸.

The Agricultural sector is an important source of livelihood for rural residents in Jordan, who make up 8.4% of the total population according to 2021 World Bank statistics. About 25% of the rural population depends on agriculture for their sustenance ⁹. The agricultural sector in Jordan is a fundamental pillar for supporting foreign workers and Syrian refugees, as it is one of the few economic sectors open to non-Jordanians.

According to some statistics from the Zaatari refugee camp for Syrian refugees, agricultural work was a primary source of employment for the refugees residing in the camp, with 64% of the work permits issued for the camp refugees being for agricultural work. The results gathered during this study confirm that agriculture is the main source of income for Syrian workers. Table number (1) shows the distribution of paid workers in the agricultural production sector by type of employment, gender, nationality, and age for the year 2021, indicating that most workers in agriculture are seasonal, temporary, and non-Jordanian.

Table number (1):Distribution of paid workers in the agricultural production sector by typeof employment, gender, nationality, and age group for 2021

Distribution of paid workers by gender and age group		casual workers		seasonal workers		permanent workers	
		Jordanian	Non Jordanian	Jordanian	Non Jordanian	Jordanian	Non Jordanian
Males	12 - 16 Years	18	16	85	157	745	837
	More than 16 Years	6412	18428	1732	5744	23539	26886
Fema- les	12 – 16 Years	0	0	0	0	155	0
	More than 16 Years	194	39	617	635	7563	3299

Reference: Department of Statistics, Number and Characteristics of Workers in Plant Production, 2021

Table number (2) shows the number of workers in animal agricultural production, indicating that most workers from families owning agricultural or are permanent workers.

Number of Workers in Animal Production by Type of Labor, Gender, and Nationality 2020 Males Females Total النشاط ونوع Jorda-Non Non Non العمالة Total Jordanian Total Jordanian Total Jordanian Jordanian **Jordanian** nian permanent 1,186 10,183 11,369 15 2 17 1,201 10,185 11,386 workers seasonal 6 269 275 7 1,175 1,182 13 1,444 1,457 workers casual 713 1,345 2,058 36 1,334 1,370 749 3,428 2,678

0

13,267

38,743

81

38,824

Table number (2):

Reference: Department of Statistics, Number and Characteristics of Workers in Animal Production, 2020

13,267

25,556

workers workers from family

holder's

25,475

81



The Jordanian agricultural sector is characterized by its diverse production methods and technologies. It plays a significant role in improving economic performance and enhancing the prospects of increasing food security in the Kingdom through its direct and indirect contributions to various service and production sectors. This includes increasing production and employment, enhancing self-sufficiency levels, boosting investment, and supporting exports. In 2021, the sector's contribution to the Gross Domestic Product (GDP) was 4.7%¹⁰.

Recent years have seen success in implementing the National Plan for Sustainable Agriculture (2022-2025). In 2022, the agricultural sector's added value grew by 29.3% at current prices compared to 2021. The sector's current price growth rate was 5.7%, higher than the overall GDP growth rate of 5.2%, according to the annual statistical data of the national accounts Released by the General Statistics Department in 2022 ¹¹.

According to the World Bank, the contribution of the agricultural sector to the GDP is expected to increase in the coming years. The "My Land" program, funded at \$125 million, aims to enhance the development of Jordan's agricultural sector by improving its resilience to climate change, increasing competitiveness and inclusiveness, and ensure food security in the medium to long term ¹².

The success of the agricultural sector, and consequently national food security, depends on water security. Jordan is one of the world's poorest countries in terms of water resources. This poses a significant challenge to fully exploiting its arable land. The total amount of water used for all purposes is approximately 1.1 billion cubic meters annually, with more than 50% used for agriculture. Irrigated agriculture ¹³ accounts for 90% of Jordan's total agricultural output ¹⁵.

This indicates the strong environmental and economic impact of irrigation in the Jordanian agricultural sector, using about 40% of groundwater and 55% of surface water resources, distributed across irrigated areas for fruit trees, field crops, and vegetables ¹⁴. The Jordan Valley is the largest consumer of irrigation water in Jordan due to its high agricultural productivity, representing more than 70% of the total agricultural output. Currently, 90% of treated wastewater is used, with 79% directed for irrigation in the Southern and Central Jordan Valley. Despite its history of relying on rainwater for agriculture, highland areas have seen an increase in their irrigation needs to maintain agricultural production ¹⁶.

Legal Framework Governing Workers in the Agricultural Sector

The key elements of the legal framework that regulates agricultural workers in Jordan comprise the Labor Law, specific regulations for those employed in agriculture, the Social Security Law, and the rules for hiring foreign labor. The following is a presentation of how these components address the subject:

2.1.1 Jordanian Labor Law

Jordanian Labor Law of 1996 and its amendments include numerous provisions that define workers' rights. Article 56 of the Labor Law states that a worker should not work more than 8 hours per day and 48 hours per week ¹⁷. Article 46 mandates that employers pay their employees' wages within seven days of the date they earned them ¹⁸. The law also allows workers to work hours beyond the legal limit, provided they are compensated extra for working on holidays or during religious and national festivals. Article 59 stipulates that if an employee works overtime, the employer is legally obligated to compensate them at a rate of 125% of their usual wage ¹⁹.

In the case of working during official holidays, employers must compensate for any extra work at a rate of 150% of the employee's wage. According to Article 61 of the Labor Law, each worker is entitled to 14 days of paid leave annually ²⁰. However, the penalty for employers who deny two consecutive years of paid leave is limited to a fine of 100 Jordanian Dinars and a requirement to pay the annual leave allowance retroactively to their employees. Article 12 states that all non-Jordanian workers must obtain a work permit from the Minister of Labor, valid for one year and renewable annually by the employer, who pays a fee for each work permit issued by the Ministry of Labor for non-Jordanian workers ²¹.

Upon examining the provisions of the current Jordanian Labor Law, one can notice several imbalances that significantly restrict the right to practice the freedom of trade union organization. This is evident in the texts of Articles 2, 44, 98, and 116 of the law, which contradicts the contents of the Jordanian Constitution, as well as the international covenants on civil and political rights; and economic, social, and cultural rights, and the relevant international labor conventions related to the right of organization. The Jordanian government limits the number of labor unions in the country ²². Although the constitution and the Jordanian Labor Law allow the formation of unions, their number remains limited due to the government imposing many restrictions on their ability to defend workers' rights and the centralization of union-management ²³.

In Jordan, workers have the right to form unions, but only in 17 specific industries. No new union has been formed since 1976 despite the diversity of sectors and the increase in the workforce. This continued until 2011 when independent labor unions were established for sectors without existing unions. To form a union, government approval is required, and joining the country's semi-official union federation, "The General Federation of Jordanian Trade Unions," is necessary. This federation has the right to set the internal system for both the unions and the federation. The unions (whether the administrative body or the general assembly) are not given any organizational role, making them merely tools for implementing the instructions of the General Federation of Unions according to Article 100. In this context, this federation and the independent labor unions are not officially recognized by the government, limiting their effectiveness, including the independent union for agricultural workers ²⁴.

Additionally, labor unions lack internal democratic mechanisms that reflect the interests of workers. Instead, union boards control the formulation of internal regulations and are limited to a small group of people. This undemocratic practice has led to a few administrators dominating many labor unions for extended periods with infrequent elections.

In contrast, the agriculture sector has a significant and active history in labor and civil society organization. In 2006, agricultural workers protested their working conditions, demanding higher wages and improved work environments ²⁵. These protests led to achievements in labor organizations, including the formation of a quasi-union for day laborers in agriculture. However, efforts to form their unions were unsuccessful. Instead, in 2022, the Jordanian government incorporated agricultural workers, water and sewage service workers, and cement workers into existing unions rather than establishing new ones for each group ²⁶.

Starting in 2020, with assistance from the International Labor Organization (ILO), agricultural committees were established in Northern Jordan and the Jordan Valley. These committees, formed in collaboration with farmers, aimed to enhance the rights of agricultural workers and facilitate collective bargaining ²⁷. During the COVID-19 pandemic, these committees raised awareness among farm owners and workers about the pandemic threats and provided information on safe working conditions, including supplying masks and personal protective equipment ²⁸. However, women's participation in labor unions remains low. A 2015 study by the United Nations Entity for Gender Equality and the Empowerment of Women revealed that women constituted only 32% of the members of the General Federation of Trade Unions. In 17 affiliated unions, women were absent in seven and had a low average participation rate 14% in the rest. The highest female participation was in the garment sector, where 70% of members were women. Remarkably, no women were included in the executive committee of the General Federation of Trade Unions, with female participation in the federation totaling only 25% ²⁹.

2.2.2 Social Security Law

The significance of social security in achieving social justice within a community lies in its provision of services, assistance, and benefits to those in need or who are entitled to them. These services are diverse and extremely important, addressing specific needs, risks, or crises such as work-related injuries, occupational diseases, death, disability, old age, maternity care, and unemployment ³⁰.

Recognizing that social security coverage is mandatory for all workers, the Social Security Corporation has expanded its scope to include as many workers as possible. This expansion is achieved through awareness programs and initiatives highlighting the importance of participating in social security, and through continuous amendments to its laws. Over the years, all establishments, including those in the public sector (both civilians and military personnel), have been mandated to provide social security, along with the option for voluntary participation in informal sectors. Recent amendments have extended coverage to new groups such as agricultural workers, self-employed professionals and artisans, including tourist guides, yellow taxi drivers, public service vehicle operators, and smart application drivers, thereby offering social protection to groups previously not covered ³¹.

The scope of this law is not comprehensive as it does not cover workers in institutions not required to register their employees for social security. It also excludes workers in the informal sector, day laborers, and hourly workers who work less than 16 days a month ³². As a result, hundreds of thousands of workers in Jordan remain outside the social security system. The evasion of providing worker insurance can be attributed to the ineffective enforcement system, which includes inspecting establishments for compliance and ensuring all employees are covered by social security. Additionally, penalties in this area are not sufficiently stringent. The law in Article 3 also stipulates various types of insurance, such as (work injury, retirement benefits, disability and life, maternity, unemployment, and health insurance). However, obtaining health insurance requires a decision from the Council of Ministers, a stipulation that fails to meet globally recognized standards of health insurance provision involving workers, employers, and the government.

According to the Social Security Corporation, the agriculture sector is one of the riskiest, with many workers lacking health insurance ³³. In cases of injury, these workers must bear their medical expenses while working in an industry that already pays very low wages and poses significant health risks without financial support in case of accidents ³⁴.

Workers' access to social security protection also depends on their debt levels according to Article 58 (B). Non-Jordanians without a bank account balance are not entitled to social security ³⁵. This significantly affects Syrian families, predominantly working in agriculture, who form one of the most indebted demographics in Jordan ³⁶.

Considering the recent amendments introduced by the Social Security Law for the year 2023, an amendment was made to Article 59 of the original law by adding the following paragraph:

C.1. For private sector establishments, a reduction in the monthly contributions rate for insured Jordanians who are under the age of thirty and have not been previously covered by the provisions of this law shall be determined, with the percentages of reduction, conditions, sectors, and activities benefiting from this reduction being specified by a system issued for this purpose, provided that the reduction rate does not exceed 50% of the retirement, disability, and life insurance contribution ³⁷.

Additionally, individuals are now fully covered by retirement, disability, and death insurance once they reach the age of thirty.

Considering that a significant percentage of agricultural workers are under the age of 30, these amendments will have a negative impact, discouraging their participation in the labor market in general and the agricultural sector in particular. Farm owners who include workers in social security and have workers over the age of 30 may be incentivized to replace them with younger workers to save on the contributions paid to the Social Security Corporation. Another paragraph was added to the same Article (59):

D.1. Workers in agricultural holdings shall be covered by work injury and maternity insurance until a decision is issued by the Council of Ministers to include them in all insurance schemes, based on the Council's assignment, with the starting date for implementation to be determined in this decision ³⁸.

This necessitates an amendment to this article, as workers in agricultural holdings should be fully covered by all the insurances stipulated in the Social Security Law, not just work injury insurance.

2.2.3. Agricultural Workers System

This system, enacted in 2021 under the Labor Law, includes agricultural workers under the provisions of both the Labor and Social Security Laws. It defines an "agricultural worker" as any able-bodied person performing agricultural work for an employer and does not differentiate based on nationality or the hierarchical relationship between the worker and employer ³⁹.

Article 4 of the regulation sets the working hours for agricultural workers at no more than 8 hours per day and 48 hours per week, spread over 6 days ⁴⁰. Agricultural workers are entitled to an hour of rest, with provisions for overtime work in emergencies, for which they must be appropriately compensated. Article 5 stipulates that agricultural workers are entitled to 150% of their usual wage for working on weekly rest days, public holidays, or religious holidays ⁴¹.

Furthermore, the regulation explicitly restricts the employment of children under 16 years of age, stating in Article 6 that "under no circumstances may minors under 16 be employed as agricultural workers." Article 7 guarantees agricultural workers 14 days of annual leave and an additional 14 days of paid sick leave, which can be extended for another 14 days if the worker is hospitalized. This law also extends the minimum national wage in Jordan to all agricultural workers, ensuring they are not paid below this minimum ⁴². According to Article 8, equal work requires equal pay, irrespective of gender ⁴³, and Article 12 mandates that farmers register all agricultural workers for all types of insurance covered by Social Security ⁴⁴.

Article 10 requires a level of formal organization to ensure workers' rights on the farm ⁴⁵. Specifically, farmers employing more than 20 agricultural workers must formalize an internal system for organizing work schedules, holidays, rest periods, and work penalties, subject to approval by the minister or their delegate.

This system has obligated the agricultural employer to include his agricultural workers in the insurance covered by the provisions of the Social Security Law ⁴⁶. However, the employer who employs three or fewer workers was excluded, Article 15 exempts employers with three or fewer workers from the provisions of Articles 4, 7, and 12 ⁴⁷. In these cases, work conditions are determined between the employer and workers themselves, undermining the social protections for these workers. Additionally, two months after the regulation was enacted (based on the provisions of Defense Order No. 24 of 2020), Communique No. 41 allowed farm owners to cover workers with only work injury insurance, with other insurances to be included from January 1, 2023. However, this was not implemented as the government amended the Social Security Law, including the amendment to Article 59, covering workers in agricultural holdings with only work injury and maternity insurance until a Council of Ministers decision extends full coverage.

2.2.4. Legal Framework Governing the Employment of Migrant Labor (Expatriates) in Jordan

Due to the increasing number of migrant workers and the influx of refugees and asylum seekers integrating into the Jordanian labor market, Jordan has joined numerous United Nations human rights and international labor agreements relevant to migrant labor. However, Jordan has not yet joined the United Nations Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1990), leaving a significant gap in the legal framework for protecting this group ⁴⁸.

The ILO has addressed migrant workers in specific conventions and recommendations, including ILO Convention No. 97 on Migrant Workers ⁴⁹, Recommendation No. 86 (Revised 1949) on Migrant Workers, ILO Convention No. 143 on Migrant Workers (Supplementary Provisions) concerning irregular mi-

gration ⁵⁰, and Recommendation No. 151 on Migrant Workers, which emphasizes equality and equal opportunity for migrant and national workers.

Jordan's Labor Law does not differentiate between Jordanian and non-Jordanian workers in its definition, applying to all males and females working for a wage under an employer. The law does not distinguish between regular and irregular migrant workers, with Jordanian courts treating nationals and non-nationals equally in legal disputes. However, according to the Ministry of Labor, there are 28 professions closed to migrant workers, where renewals of existing work permits are not permitted ⁵¹.

The Social Security Law does not distinguish between Jordanian and migrant workers but requires migrants to have an official work permit. In practice, employers tend to employ unlicensed migrant labor to save on social security costs and often pay below the minimum wage. Unlicensed migrant workers accept these conditions to avoid the costs and procedures of obtaining official work permits and social security registration ⁵².

However, since 2021, the proportion of non-Jordanian workers has risen due to the legalization and regularization of migrant labor and efforts to address imbalances in the Jordanian labor market. This included granting a series of financial exemptions related to work permit fees and residence permit fines for non-Jordanian workers who were in violation. The increase is also attributed to the Jordanian government's decision, following an agreement with the General Federation of Jordanian Trade Unions, to issue flexible work permits for Syrian refugees ⁵³. These permits allow refugees to move between similar jobs within the same sector and between different employers and provinces, in addition to simplifying the procedures for them. In 2021, the number of permits issued reached 62,197, nearly double the 36,117 issued in 2020.

Jordan's Labor Law regulates the contracting of migrant workers. Article 10 outlines conditions and procedures for employing and recruiting non-Jordanian workers, considering labor market needs and the list of closed professions. The Ministry can set the percentage of non-Jordanian labor in any economic sector to gradually replace it with Jordanian labor. Article 11 allows non-Jordanian workers to claim their social security entitlements if they wish to permanently leave the country, provided they apply within three months of their work permit's expiration. Article 12 details conditions for transferring a recruited or employed worker from one employer to another upon work permit expiration, allowing workers to move within the same sector or to another, with the exception of the agricultural sector. Agricultural workers can transfer within the same sector with agreement from both employers and Ministry approval, canceling the original work permit and issuing a new one with fees for one year. Workers can also be employed temporarily in the same sector without canceling their work permit or incurring new fees, subject to Ministry approval and a usage agreement outlining the responsibilities of both employers, including work injuries.

3. Study Results

The following will present the results of the study, which included the findings of the survey study and the analysis of in-depth interviews with experts in the agricultural field, as well as the analysis of the results of focus group discussions as follows:

3.1. Demographic Distribution of Workers Covered by Survey

The survey of agricultural workers included 407 workers from all provinces covered in the study: Jordan Valley, Mafraq, Irbid, and Zarqa. The results showed that migrant labor still constitutes the majority of workers in agriculture, with 57.5% being non-Jordanian. However, the largest demographic group currently working in agriculture consists of local Jordanian workers, followed by Syrian and Egyptian workers. Women make up 30% of the total agricultural workforce, with Syrian women forming the majority of workers from Syria.

The survey results indicate significant geographical trends in Jordan's agricultural sector, with the work-force concentrated in the Jordan Valley, where 39% of all workers are employed. Mafraq, Irbid, and Zarqa provinces have equal proportions of farmers. The results show that Jordanian and Egyptian workers are primarily employed in the Jordan Valley and Zarqa, while Syrian workers and other nationalities are concentrated in Mafraq and Irbid.

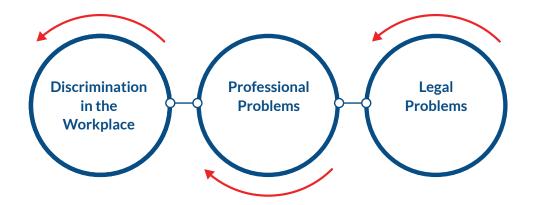
The study found that the majority of agricultural workers live in temporary housing arrangements; 49% of workers reported living in temporary accommodation or tents. It is common for families to live and work on the same farm. Based on the survey with farm owners, 21% of respondents employ entire families on their farms, and 65% of these families live on the farm. In contrast, Jordanian workers tend not to

live in temporary housing near farms; 45% reported living in their own homes, while 20% of Jordanian workers live in rented houses. Permanent housing is uncommon among Syrian and Egyptian workers, with 73% and 64% respectively living in temporary accommodations or caravans. This has significant implications for the economic and health security of farmers, as temporary housing generally involves unsafe economic conditions and lacks basic services such as sanitation, clean water, transportation, hospitals, and schools. These factors can encourage the exploitation of workers, including low wages and child labor.

Regarding domestic responsibilities, 54.5% of the workers are heads of their households, a figure much higher among Syrian men 75% and Egyptian workers 87.3%. Only 23% of female workers reported being the sole breadwinners of their families. The survey also revealed that the majority of respondents are married with children; 63.7% have children under the age of five. This suggests that work practices, long working hours, and transportation issues can all impact childcare, as workers face long hours away from home and may not be able to send their children to the farm, which increases the incidence of child labor, as the study will later show.

3.2. Working Conditions in Agricultural Sector in Jordan

The majority of agricultural workers in Jordan face a range of challenges, some of which amount to violations of their basic labor and human rights, to the extent that it can be described as forced labor:



3.2.1 Discrimination in the Workplace

Harnessing the immense human potential and energy available in both genders in Jordan stands as one of the greatest challenges facing developmental efforts in societies. This potential must be invested in to achieve the desired economic viability, as, unfortunately, only minor improvements have been realized so far. Discrimination hinders farmers, both men and women, from participating effectively in the labor market, characterized by lower wages, lack of social protections, insufficient childcare facilities, and the absence of supportive laws.

3.2.2. Professional Problems: Challenges of the Work Environment

Farmers, both men and women, face a variety of problems and challenges daily that impact their performance at work. These professional issues encompass all the difficulties that obstruct their work, as well as problems that prevent them from performing their duties effectively. The constraints and challenges facing farmers (males & females) can be divided into subcategories:

1. Employment Problems:

The interview results suggest that discri mination starts at the hiring stage, where Syrian workers are employed by a 'shawish', a relatively trustworthy individual capable of organizing and transporting large groups of laborers to areas in need of a workforce ⁵⁴. The shawish earns by taking a portion of the farmer's wages. A Syrian female farmer states, **"We are employed through the shawish, who takes a cut of our wages."** ⁵⁵ The findings indicate that some Syrian workers prefer working with the shawish because, in their view, he understands the agricultural system and offers better services than the farmers themselves, who often overlook the workers' needs and don't understand their daily logistical requirements.

We are employed through the shawish who takes a cut of our wages. One of the participants in FGDs In contrast, Jordanians are mostly employed through family and acquaintances, with 57% of the workers in the survey reporting direct contact with employers. A Jordanian participant notes, **"Families and acquaintances play a role in our employment, and the farm owner contacts us directly."** ⁵⁶

Egyptian workers deal directly with employers and are brought in through their communities in specific locations ⁵⁷, indicating a lack of clear employment policies in the agricultural sector.

The employment trends are more pronounced among Syrian and Egyptian workers, with about 72% of Syrian workers operating on a timetable and paid hourly, and 69% of Egyptian workers employed monthly.

It's more common for female farmers to work hourly due to its compatibility with caregiving burdens and the so-called "double burden", allowing them to work a few hours per week when their domestic responsibilities permit.

2. Problems with Work Permits and Contracts:

The findings indicate that the vast majority of farmers, both men and women, of Syrian nationality and other non-Egyptian nationalities, do not possess work permits for the agricultural sector. Only 22% and 38%, respectively, have work permits. For Syrian workers, there's a significant gender disparity in the issuance of work permits. Official statistics from the Zaatari refugee camp show that 90% of all issued work permits were for males, a fact corroborated by the survey results of this study, which revealed that 39% of Syrian males hold a work permit, compared to just 5% of Syrian females ⁵⁸.

The reasons for agricultural workers not possessing work permits, as identified in focus group discussion sessions, include the lack of supervision in the agricultural sector. As one worker noted, "Farmers don't ask for work permits, and labor offices don't conduct inspections, so what do we need the permits for?" ⁵⁹ Additionally, the nature of work in agriculture is seasonal and not consistent year-round.

Despite most Egyptian workers having work permits, they are not for agricultural work but mostly for cleaning jobs. One female farmer said, "Issuing a work permit isn't necessary because work in the agricultural sector is freelance and irregular." ⁶⁰ Another added, "I have a work permit, but as a cleaner, not as a farmer." ⁶¹ Egyptian workers who have permits for agricultural work often leave for other sectors with better financial incentives, as indicated by the majority in focus group discussion sessions. Both male and female farmers agree that there is no need to add costs to themselves without any real benefit to their working conditions. Thus, obtaining a permit becomes an additional burden rather than a benefit ⁶², highlighting the absence of decent work conditions such as minimum wage, regular working hours, social protection, prevention of labor exploitation, and ensuring the protection of their rights.

One of the primary reasons agricultural workers do not obtain work permits is the high cost of the permits. A female farmer mentioned, "Permit brokers [intermediaries between business owners and farmers] sell work permits at inflated prices [charging a commission]" ⁶³. An Egyptian participant said, "A permit costs 400 JD, but the broker asks for 600-700 JD." ⁶⁴

For Syrian farmers, their reluctance also stems from fears of losing aid from the UNHCR, such as food coupons and eye scan verifications, as one farmer expressed, "Concern about losing assistance because their income would be deemed too high with a permit." ⁶⁵

This explains why 90% of the workers without work permits in the survey results have no intention of obtaining one in the future. Employers generally do not apply for work permits on behalf of their workers, with 98% of those holding work permits having obtained them independently, and 47% of workers indicating they had to pay fees to get a permit. Despite these hurdles, many workers view permits positively, recognizing the benefits of stable and secure employment, as agreed by 68% of the workers. Regarding work contracts, workers of various nationalities in focus group discussion sessions reported not having written contracts. Instead, 89% of agricultural workers are employed through verbal agreements (Jordanian law recognizes), and which are based on oral understandings of wages, working hours, conditions, termination terms, etc. Interestingly, Egyptians have the highest rate of written contracts (39%), while Jordanians and Syrians are equally likely (98% each) to be employed through verbal agreements.

The preference for not using written contracts, as discussed in focus groups, is attributed to the fact that most of them work for a limited duration and only seasonally. As for the terms of the employment contract, such as wages and working hours, they are typically referred to as an "oral agreement or implicitly understood without explicit mention," according to one of the participants ⁶⁶. However, due to the absence of written contracts, farm workers face many problems with farm owners and are unable to file complaints with the relevant authorities. For example, one of the female farmers reported, "The employer did not pay my son, telling him he couldn't complain to prove it because there was no written employment contract." ⁶⁷

Although agricultural workers can legally establish their rights even without a written contract, their fear of losing their jobs and income prevents them from filing complaints, especially since most of them do not have legal status due to the lack of work permits. However, in some farms, the employer or shawish deals with the farmers through a system of cards and ledgers to ensure their right to wages. A participant in the focus group discussion sessions said, "The shawish keeps a ledger recording the attendance and absence days for each farmer, to ensure our right to wages when we are paid." ⁶⁸

3. Long Working Hours:

The survey results revealed that 79% of workers work at least 6 hours daily at the start of their employment. It is very common for workers to be employed for long hours with few breaks, even for temporary work. The results showed that Egyptian workers often work the longest hours with the fewest breaks, with 32% of all respondents reporting working 10 hours or more daily in September, and this figure rising to 51% among Egyptian workers.

Participants in focus group discussions pointed to the lengthy daily working hours, ranging from 8 to 13 hours ⁶⁹. However, during some seasonal work times, they are forced to work extra hours, sometimes exceeding the legal limit of 8 hours per day or 48 hours per week, with work hours reaching more than 13 hours daily.

The study also found that 56% of workers worked more than 6 days a week in September, while 46% worked more than 48 hours a week. However, only 15% of respondents get a day off during the week, and 53.3% reported not receiving compensation for overtime work. These numbers show that many agricultural workers often work beyond the limits set by Jordanian labor laws, indicating a clear shortfall in law enforcement by farm owners, as mentioned by participants in focus group discussions.

The study also found variations in working hours between the plant and animal sectors. Workers in cow and poultry farms reported working 8 to 9 hours a day in a discontinuous manner, due to the nature of their work. This is possibly because workers in this sector often reside in private accommodations on the farms, are mostly of Egyptian nationality, enjoy higher incomes of up to 1000 Jordanian Dinars monthly, and have social security ⁷⁰. Similarly, workers in nurseries have to be present at the nursery all the time, thus they intermittently work 8 hours ⁷¹.

Working hours also vary from region to region. For example, in the Jordan Valley areas, working hours are divided into morning and evening shifts to accommodate the climate, with work starting at dawn and continuing until 10 a.m., before temperatures rise significantly, and then resuming in the afternoon after the direct impact of the sun's rays lessen. In contrast, work in the provinces of Mafraq, Irbid, and Zarqa typically occurs in a single shift.

Working condition difficulties are exacerbated by a lack of awareness among workers about their legal rights. The survey results showed that many workers are unaware of their labor rights under Jordanian law. About half of the survey participants were not aware of the restrictions on the number of hours they can work each week. Additionally, 52% of workers were unaware that they are entitled to a break every four hours of work, 51% did not know that the law prohibits working more than 8 hours a day/48 hour a week, and 50% were not aware that they are entitled to higher pay for overtime work. Meanwhile, 54% of workers did not know that they are entitled to a paid annual leave of 14 days.

4. Low Wages, Non-Payment of Agreed wages and/or Delays in Payment:

The results show that the agricultural sector is characterized by low wages, negatively impacting the living conditions of workers and making them vulnerable to poverty. According to the survey, 72% of the workers reported that their wages are insufficient to cover all their expenses.

Wage distribution varies according to the type of labor and the nature of the work, as discussed by participants in focus group discussion sessions and as depicted in Figures (1) and (2) of the survey study.

Syrian workers: are paid by the hour and receive wages ranging from one to one and a quarter JD ⁷². An employer explained, "Syrians earn from one to one and a quarter Dinars," ⁷³ and justified the lower wages for Syrian workers by saying, "The shawish, who is responsible for bringing in Syrian workers, takes a portion of their wages, which is why they don't earn as much as workers of other nationalities." ⁷⁴

Egyptian workers: They are paid monthly (from 300 to 350 JD), hourly (one and a half to two JD), or based on a share of the harvest (receiving an agreed-upon percentage of the crop from the employer) ⁷⁵. The results also indicate employers' preference for Egyptian labor, with one saying, "I prefer Egyptian workers over Jordanian and Syrian ones because one Egyptian worker is worth two of the others." ⁷⁶

Jordanian farmers: They are paid by the hour, receiving wages ranging from one and a half to two JD.⁷⁷

Pakistani workers: A farm owner mentioned that some Pakistani workers operate under a partnership system. ⁷⁸

Participants in the focus group discussions noted that wages vary depending on the agricultural products. One farmer explained, "The hourly rate is one Dinar for soil unloading, but for harvesting vegetables like tomatoes, the daily wage becomes 8 Dinars for 12 hours of work." ⁷⁹ All the employers in the focus group discussions emphasized that the method of wage payment varies with different agricultural products. For example, the payment for picking grape leaves is calculated per kilogram, while okra picking is paid hourly ⁸⁰.

There is a gender disparity in wages, with women typically earning less than their male counterparts. An expert said, "There is no equality in wages; a woman earns less than a man even though they perform the same tasks because she is not primarily responsible for the household like the man."⁸¹ This viewpoint represents the majority opinion among experts in indepth interviews. This global issue, prevalent even in more developed societies, also poses a challenge locally. A female farmer expressed, "I know the man is responsible for the family and deserves the increase, but sometimes I feel it's unfair because we do the same tasks, and sometimes we work more." ⁸² Women are paid less simply because they are women, symbolizing the undervaluation of their paid work in the labor market. ⁸³

Payment methods in this sector vary, depending on the prior agreement between the employer and the farmer. Some farmers are paid daily, others weekly or monthly, and a few are paid at the end of the agricultural season, receiving financial advances to meet their needs during the working period. In some cases, wages are calculated based on the quantity of produce (by kilogram or sack), or an agreement is made for farmers to receive a certain percentage of the profits (crop) at the end of the season instead of cash wages. This system, often referred to as "partnership", is commonly practiced between employers and workers of Pakistani and Egyptian nationalities ⁸⁴.

Workers noted that receiving a share of the crop is better than being paid hourly or a wage, as they can sell it at a higher price. One worker said, "Instead of a wage, I take a part of the crop; for example, I can sell a kilo of tomatoes for two and a half Dinars, which is better than just earning one and a half Dinars." ⁸⁵

The results showed that negotiating wages with employers is almost impossible, primarily because the majority of farmers, both men and women, in the sector are from poorer segments of society. They urgently need work to meet their own and their family's basic needs, so they accept the offered wages, even if they are low, without discussion. One worker stated, "We can't negotiate wages. Those who try get fired from their job." ⁸⁶ The agricultural labor market is limited and competitive, making it difficult for workers to negotiate better wages. If a worker requests higher pay, the farm owner can easily replace them with someone else. Regarding not receiving the agreed-upon wages or experiencing delays, the results pointed out that a quarter of the female participants and some male participants in focused group discussion sessions, particularly of Syrian nationality, did not receive their full wages. One of them said, "Sometimes I earn 12 Dinars, but the employer only gives me 8 Dinars with unreasonable justifications." 87

The results also indicated that Syrian farmers, both male and female, are more likely to experience reduced wages or not receive full payment. A woman shared, "Two days ago, my husband worked 6 hours on the farm and 3 hours transporting vegetables, but the farm owner only paid him for the farm work and not for transporting the vegetables." ⁸⁸

The majority of participants indicated that employers do not pay wages commensurate with overtime hours, whether during regular workdays, religious holidays, or official public holidays. They receive a different wage from their usual pay, meaning the overtime pay does not align with the increase stipulated in Article 59 of the Labor Law. One participant stated, "The work on official holidays and even during the festive season is paid at the same rate we receive on regular working days." ⁸⁹

Sometimes I earn 12 Dinars, but the employer only gives me 8 Dinars with unreasonable justifications one of the participants in FGDs

Some participants mentioned staging a sit-in to protest wage theft, but to no avail. A participant shared, "We held a sit-in to stop the theft of our wages and to demand our right to a union, but unfortunately, it was futile." ⁹⁰ Some employers justify not paying the full wages due to lower crop prices or higher production costs and increased prices of agricultural pesticides. ⁹¹

Half of the participants in the focus group discussion sessions, particularly those working in animal production farms, mentioned delays in wage payments by employers, ranging from one to three months. One of them said, "The employer delays paying wages for two or three months until he receives the milk checks and then pays us." ⁹² In the agricultural sector, wage payment delays range from 5 to 15 days. A farmer commented, "The shawish delays our wages from 10 days to two weeks." ⁹³

5. Lack of Public Transportation, High Transportation Costs, and Poor Quality:

Despite employers covering transportation costs, there are challenges affecting the health and safety of workers, such as exceeding the allowed limit for work hours (Overtime). As one worker said, "The bus fits thirteen passengers, but the owner loads twenty or twenty-five because he earns a dinar per passenger." ⁹⁴ This indicates a lack of adequate supervision in the transport sector.

In Mafraq, farmers recounted a tragic incident where nine workers died in a road accident involving two overloaded pickup trucks. One female farmer likened the crowded buses to "being like sardines in a can," ⁹⁵ highlighting the serious safety concerns due to overcrowding. Furthermore, if a transport accident occurs, the passengers themselves bear the medical expenses, except in rare cases where farm owners cover these costs as a gesture of goodwill.

All workers in the focus group discussion sessions agreed that most of these buses lack regular maintenance, increasing the likelihood of technical failures during trips. The absence of proper roads also raises the risk of accidents. A female farmer "recalled a day when the bus almost overturned due to rough dirt roads." ⁹⁶

Workers also complained about the lack of regular and public transportation near the farms where they work or during break times, forcing them to wait for the bus that brought them.⁹⁷ This restriction of movement, especially for women, limits their work opportunities, as some women prefer not to travel, particularly in patriarchal environments.⁹⁸ As a result, many agricultural workers end up living on the farms where they work. The survey showed that 53% of workers live on their employer's farm, with the majority being from nationalities other than Jordanian, Egyptian, or Syrian, accounting for 88% of these workers. Among them, 78% are Egyptian, 64% Syrian, and 28% Jordanian.

Regarding living conditions, 61% live in tents or non-permanent houses, 23% in shared barracks with communal living spaces, and only 6% have private rooms. This accommodation is usually provided free by the farm owner, and it's uncommon for these workers to pay rent. For those not living on the farm, 66% reported living near it, with Jordanian and Egyptian workers more likely to do so (75% of Jordanians and 78% of Egyptians). This proximity reflects that Jordanian and Egyptian workers typically work in the Jordan Valley, finding nearby housing with minimal commuting. Only 33% of Syrian workers live close to the farm and use transportation to get there. These living arrangements pressure workers to stay on the farm and may lead to accepting any work arrangements offered by the employer for fear of losing their housing.

6. Lack of Sanitary Facilities and/or Suitable Resting Areas, and Insufficient Time Allocated for Breaks:

The lack of sanitary facilities (toilets) on farms is a significant social and environmental challenge for workers in the agricultural sector. Most participants in focus group discussions noted that either no sanitary facilities exist on the farms or, if present, they are not properly equipped (lacking clean toilets and washing facilities) and are unsuitable for use and far from their work areas. ⁹⁹ Some farms have facilities within the workers' accommodations, but these are not accessible to others. This situation makes it difficult for everyone, especially female farmers, to use these facilities. As a result, they often have to find a secluded spot away from others to relieve themselves behind trees. A female farmer stated. "There are no toilets. Women relieve themselves behind trees, and sometimes a deep hole is dug to be used as a toilet." ¹⁰⁰

Moreover, workers in the agricultural sector endure harsh and demanding work conditions. Their work requires physical effort and continuity, especially during planting and harvesting seasons, and they work in varying weather conditions. The results indicated that they work in high temperatures in summer; and cold, rain, and frost in winter. One worker remarked, "Our working conditions due to the climate are bad, with heat, rain, and frost. There are no holidays."¹⁰¹

Workers also agreed that they don't get enough rest, often receiving only a quarter or half an hour instead of an hour, and sometimes the hour is split into two or three periods. Breaks are typically scheduled during midday, when temperatures are at their highest. A female worker mentioned, "We only take a fifteen-minute break for breakfast." ¹⁰² There are no toilets; women relieve themselves behind trees, One of the participants in FGDs

Farmers also expressed dissatisfaction with the lack of suitable resting places, often resorting to sitting under trees to escape the sun. A worker suggested, "A caravan should be provided for rest breaks and also for prayers, instead of resting under trees. Sometimes we sleep and rest between corn crops to protect ourselves from the sun." ¹⁰³ Additionally, workers complained about the quality of food provided during breaks, as the simple meals (yogurt, cheese, falafel sandwiches, occasional canned tuna, or biscuits) do not meet their daily nutritional needs or provide enough energy to continue working. ¹⁰⁴

7. Lack of Gender Specific Accommodations:

The results indicate the absence of some of the accommodations for female farmers, as farms do not provide childcare facilities. One of the experts in focus group discussion says, "Why underestimate the rights of female farmers? There isn't a single farm that provides childcare for female workers." ¹⁰⁵ One of the farmers adds, "We struggle with young children. Because we don't work during the noon hours, we go home and take care of household chores and the children, and then we return to work. However, many days we take them with us and expose them to risks like falling into water pits." ¹⁰⁶ One farm owner expresses the opinion shared by all employers in focus group discussion saying, "There is no childcare facility, and we don't even consider establishing one. Imagine having a childcare facility on the farm." ¹⁰⁷

The results also highlight that the unavailability of bathrooms and transportation compounds difficul-

ties for women. One of them says, "One day, my period came earlier than expected, and I was embarrassed because there is no bathroom to go to, and I couldn't return home due to the absence of public transportation. We have a driver who brings us to the farm, so I had to use extra clothes." ¹⁰⁸

Furthermore, the results show that farming mothers resume work just one week after giving birth, without considering motherhood as a biological function. This could have several health and social consequences for the mother, child, and the family as a whole, as the mother's body needs time for recovery and healing. The mother may face difficulties in adapting to a demanding work schedule, which can increase the risk of stress and fatigue. ¹⁰⁹ The lack of sufficient relaxation and rest time can also affect the mother's mental health, leading to increased levels of tension, anxiety, or even depression.

3.2.3 Legal Problems

Some legal issues are evident due to the absence of regulatory legislation for the sector:

1. Lack of Social Protection

The results indicate that the majority of male and female farmers do not enjoy various forms of social protection, making them vulnerable to social, health, and economic risks. This increases the spread of poverty and marginalization. Additionally, they face challenges related to increased exposure to exploitation and threats from employers:

2. Lack of Social Security

Despite the necessity of including all workers in social security without discrimination, the right to this protection is lacking for those in the agricultural sector. This issue was highlighted by participants in focus group discussion sessions and experts in in-depth interviews. The survey results showed a low percentage of insured workers in social security, with only 11% of workers covered, most of whom are male Egyptian workers 21.6%. The reason is attributed to their possession of written work permits and contracts that mandate their inclusion in social security. Meanwhile, the percentage of insured Jordanian male workers is 12.9%, and only 5.4% of Syrian workers are covered. One of the primary reasons for the exclusion of workers from social security is the seasonal and unstable nature of agricultural work, coupled with the absence of a system for paying social security contributions based on daily work. Participants in focus group discussion sessions agreed that employers avoid enrolling workers in social security due to the high cost they bear, and workers' inability to afford optional social security due to their low wages.

An expert in an in-depth interview stated, "In May 2021, the agricultural workers' regulation was issued, requiring farms with three or more workers to enroll them in social security. However, employers are not complying due to lack of enforcement and insufficient monitoring in the sector." ¹¹⁰ Many farmers, who are paid monthly, reported not being covered by social security and fear losing their jobs if they file a formal complaint against their employer. A farmer comment-ed, "Whether the job is monthly or otherwise, no one in the agricultural sector is covered by social security." ¹¹¹

Despite this, a few workers are enrolled in social security, one of them said "mainly Egyptians, but often employers circumvent the rules by enrolling them temporarily or not paying the required contributions." ¹¹²

The agricultural sector in Jordan is unregulated, and the current legal system does not provide a mechanism for daily wage-workers, who constitute the majority, to make social security payments, thus excluding them from social protection. Despite new laws requiring farms employing three or more workers to register them for social security, there is insufficient enforcement or inspection to ensure farm owners comply. Even with legal interventions, many farm owners cannot afford the additional financial burden of enrolling their workers in social security due to high contribution rates relative to the wages in the agricultural sector.

Lack of Health Insurance:

The results indicate a key factor driving agricultural workers towards poverty: they lack health insurance, despite frequent occupational injuries and high medical costs in Jordan. An expert noted, "The weak social protection system for many farmers not covered by social security and their exposure to work accidents without health insurance are major obstacles in the agriculture sector." ¹¹³ A worker added, "I have no health insurance, and the high cost of treatment in Jordan forces me to rely on traditional medicine or pharmacy visits for treatment." ¹¹⁴

While health insurance rates are higher than social security enrollment rates, they remain low. About 62.2% of agricultural workers lack health insurance. Jordanian workers usually get insured through government insurance, with men being more likely uninsured compared to women, where nearly three out of four Jordanian women have government insurance. Foreign workers struggle to obtain health insurance, except for some Syrian workers covered under refugee services. Yet, a majority of Syrian workers (64.3% of males and 55% of females) lack insurance.

The importance of health insurance in agriculture becomes evident when workers suffer injuries, impacting their jobs, financial security, and health. Of those injured, 81% needed hospitalization, and 71% had to take leave from work to recover. Since most farmers rely on their daily wages, injuries mean losing their primary income source. 76% had to cover their medical expenses, barely meeting their basic needs. Among those injured at work, 29% reported being fired or laid off due to taking leave. This issue is particularly common among male Syrian workers, with 60% reporting that they were fired because they took leave from work due to injury, compared to 33% of Egyptian workers. No Jordanian worker in the survey reported this issue, possibly due to family connections preventing their dismissal.

In some cases, workers receive support from employers, but this remains marginal. The survey found that employers provided transportation to the hospital in 59% of cases, leaving 41% of workers to fend for themselves in emergencies, often without transportation and distant from main hospitals. Employers paid for medical costs in 38% of cases, while 48% offered assistance or first aid after injuries.

3. Absence of Labor Inspectors in The Agricultural Sector:

The results reveal a direct correlation between discrimination in farms, widespread corruption, and the lack of oversight. In the absence of strong government monitoring, workplace regulation relies heavily on the ethics and rules set by employers, which can be somewhat tyrannical. The majority of focus group discussions highlighted the absence of labor inspectors in the agricultural sector. 77% of workers in the survey stated that there were no government inspections on their farms, indicating a lack of protection against exploitation, mistreatment, and poor working conditions. One participant expressed, representing the general sentiment, "The absence of labor inspectors on farms leads most farm owners to disregard labor laws." ¹¹⁵

Experts in in-depth interviews echoed this, noting an increasing recognition that the scope of labor inspection needs to be broader to adapt to the changing dynamics of the workforce. One expert remarked, "Agriculture is a vital sector for job provision and economic revenue. It has recently been included in social security, yet suffers from a lack of enforcement of labor laws, resulting in minimal inspections and different monitoring systems applied." The expert calls for an increase in the number of labor inspectors due to their scarcity, saying, "There is a shortage of staff. I believe there are no more than 40 inspectors across the entire kingdom, which is insufficient. Consequently, inspection visits are rare, and many farms have never been visited by an inspector." ¹¹⁷ Another adds, "There should be an intensification of labor inspectors' presence to deter employers and ensure compliance with health and safety standards in their farms." 118

The absence of labor inspectors also plays a significant role in the prevalence of child labor. The survey revealed that 12% of workers, mostly from the Syrian workforce, bring their children to work with them, especially in the Mafraq area, where they live in temporary accommodations and bring their children along.

4. Weakness of the Role of Labor Unions:

The agricultural sector is highly susceptible to discrimination due to the absence of a union representing its workers' interests. One female participant said, "I work out of financial need and face financial exploitation from the employer. What is the role of the labor union? Why isn't there a specialized union for farmers to defend us?" ¹¹⁹ Another added, "There should be a licensed union for agricultural workers to monitor violations on farms." ¹²⁰ Both farm owners and workers agree that existing unions do not represent their needs and are currently ineffective in resolving disputes within the agricultural sector. For farm owners, there is low awareness and participation in organized negotiations to address sector-level challenges with their workers. According to the survey, only 20% of farm owners said there is a union representing their work, 42% reported being unable to join this union or the General Union of Jordanian Farmers, and only 7% of survey participants are members of this union. This low participation is attributed to a lack of awareness about labor unions and the reality that most labor negotiations are conducted individually and verbally between workers and employers without any mediator.

> The absence of labor inspectors on farms leads most farm owners to disregard labor laws One of the participants in FGDs

Workers in focus group discussion sessions stated that real dispute resolution is only possible through a labor union. Dealing with disputes through employers often leads to retaliation or dismissal. Likewise, filing complaints through the Ministry of Labor's official office is slow and ineffective. For many workers, filing complaints is confusing, requires paperwork they do not possess, and largely leads to insignificant results, as the labor office does not represent their interests. Workers also believe that creating a union solely for farm owners negatively impacts farmers. Such a union should not only represent their interests and provide a platform for negotiating wages without coercion but also monitor labor rights violations and act as an executive body for the agricultural sector. Experts interviewed in this study noted that unions are critical institutions for protecting workers' rights, maintaining fair wages, and facilitating better understanding between workers and employers through sector-level decision-making participation.

3.3. Violence in the Workplace

Farmers, both men and women, are subjected to various forms of violence. Researching the phenomenon of violence requires understanding the social and political relationships and their implications on their situations as follows:

3.3.1. Causes of Violence Against Male and Female Farmers in the Workplace

The study results identified the causes and motivations of violence from the perspective of Male and female respondents:

Financial Situation and Poverty

Poverty is socially considered one of the main causes of violence, as indicated in the study. It highlights its role in the spread of violence against farmers by affecting economic and social conditions. One participant in the focus group discussion sessions says: "My economic responsibilities increased after my husband's death, and the salary I earn is what makes me tolerate the shawish yelling at me." ¹²¹

Government Negligence

The failure of governments to take measures to prevent and curb violence against male and female farmers implicates them in complicity. This inaction creates an environment where perpetrators can escape punishment, and violence against these farmers is tolerated. This leads to a culture of silence, demoralizing farmers from seeking support and protection from the state or its agents, (like police or the judiciary), rendering the violence invisible. An expert in an indepth interview states, "The laws are a deterrent but not enforced in the agricultural sector, coupled with a lack of oversight, hence people persist in such practices." ¹²² Another participant agrees, saying, "The absence of specific laws regulating violence is a key factor in its spread, along with legal illiteracy. Farmers do not know how to claim their rights." ¹²³

We want a law that protects us, we are marginalized One of the participants in FGDs

Imbalanced Power Relations

Centuries of political, economic, and social processes have allowed employers to maintain a position of power, resulting in a social hierarchy where laws and practices politically and economically weaken workers. Employers use violence against farmers, especially those of non-Jordanian nationality, to reinforce their authority. A participant in the focus group discussion sessions remarks, "We are forced to adapt to the situation, as the employer and overseer yell at us with or without reason." ¹²⁴ Moreover, in social and economic interactions, competitive laws sometimes become the primary rule, further escalating violence as per the notion "the end justifies the means". This leads to the development of subcultures or main cultures that acknowledge violence. Additionally, the repetition of violent behavior reinforces cultural values. In this context, a farmer points out, "We are treated like machines with shouting, threats, and passport confiscation, all to ensure we keep working." ¹²⁵

3.3.2 Sources of Violence Against Farmers and Farmworkers

Participants in the focus group discussions highlighted multiple sources of violence they face in agricultural work, stemming from various challenges and conditions like wages, working hours, and work environments.

A significant source of this violence is the employers in small farms and the 'waqif' (a person responsible for managing and organizing workers in large farms, appointed by farm owners). One of them mentioned, "Employers are the ones who yell at us the most," ¹²⁶ while the shawish is a notable source of violence for Syrian farmers. A Syrian farmer said, "The shawish doesn't understand us and sometimes treats us badly, with his main concern being to please the employer."¹²⁷

The findings also revealed that farmers themselves can be a source of violence. A female farmer stated, "We often face sexual harassment from farmers, especially those of Egyptian nationality." ¹²⁸ Additionally, workers outside the farm, particularly drivers, were identified as another source of violence. ¹²⁹

3.3.3 Types of Violence Faced by Male and Female Farmers

The results of in-depth interviews revealed that legal provisions are insufficient to deter violence, particularly concerning issues of discrimination and sexual harassment. Farmers, both male and female, are subjected to various types of violence on farms:



1. Psychological Violence

Farmers face various forms of psychological violence, such as threats of dismissal from work. A participant in the focus group discussion sessions shared, "The employer always threatens to fire us from the farm, even if our productivity is high, as if it's his policy." ¹³⁰

Additionally, they experience belittlement of their work. Another farmer commented, "I constantly hear phrases like 'What do you do all day? You haven't done anything."¹³¹

Female farmers often face mockery or bullying due to their personal appearance or their work. One of them mentioned, "Farmers bully me for tucking my dress into my belt." They also endure significant psychological pressure to increase productivity, as experienced by half of the participants in the focus group discussion sessions. Additionally, some farmers face psychological stress for various reasons. A female farmer recalled, "The employer yelled at me for eating a single peach, accusing me of exploiting him." ¹³³

There are also instances of employers exploiting and coercing workers, especially those of non-Jordanian nationalities, in ways that violate human rights, like passport or identity document retention. This coercion often includes forcing them to complete work or adhere to specific conditions. One farmer shared in the focus group discussion sessions, "The farm owner keeps our Syrian IDs and threatens us if he is unsatisfied with the work, he won't return them as if we are working under forced labor." ¹³⁴ This affects their right to freedom and dignity.

The escalation of psychological violence is compounded by the inability of workers to complain or report due to fear of job loss or lack of legal documentation like work permits and contracts. A woman shared, "My son worked with me on the farm and had an argument with the employer. Without a work contract or proof, the employer threatened to falsely accuse him at the police station if he demanded his rights." ¹³⁵ Another added, "I can't seek legal help because I have neither a permit nor a work contract." ¹³⁶ Furthermore, the study earlier highlighted the failure to provide farmers with their rightful benefits or necessary support to improve their working and living conditions.

2. Verbal Violence

Verbal violence experienced by farmers involves the use of harsh and demeaning words intended to harm or insult them. Participants in the focus group discussion sessions reported being subjected to swearing and cursing. One woman shared, "My previous employer used to speak foul language to insult us, and I was forced to leave the job." ¹³⁷ Farmers, both male and female, also endure shouting from the waqif or shawish or small farm owners. A female farmer stated, "I worked for a farm owner who treated his female workers poorly, shouting and raising his voice at us."¹³⁸ This type of verbal abuse can have negative psychological effects on farmers, impacting their well-being and mental and physical health, as indicated by the participants in the focus group discussion sessions.

3. Economic Violence

Economic violence faced by workers takes various forms, such as delays in wage payment, especially in animal production farms. One worker mentioned, "We have to wait until the farm owner sells the milk, so it takes months before we receive our salary." ¹³⁹

Some also spoke of not receiving their due wages. A farmer said, "We often get cheated by the farm owner. This has happened to me a lot; they take advantage of me because I am Syrian and I can't complain." ¹⁴⁰ Another added, "We Syrians settle for less because of our situation with the war and as refugees, and the employer exploits this. We worked on a farm a year ago where the owner still hasn't paid us. He answered the phone the first month, then stopped even responding." ¹⁴¹

4. Sexual Harassment

Female farmers have highlighted their experiences of sexual harassment, noting that farms and employers generally fail to implement strict measures to prevent and address sexual harassment, providing only feeble attempts at creating a safe work environment. One of the women stated, "We often face harassment through looks and gestures from the workers." ¹⁴² Additionally, they are subjected to unwanted sexual comments and jokes. Another woman shared, "We usually hear sexual jokes and comments from the farmers." 143 There are also instances of sexual misconduct from some external vegetable truck drivers. A woman recounted, "A driver delivering tomatoes to the farm undressed and tried to assault me. I screamed, he got scared and left. I informed the employer, who then fired him." 144

A driver delivering tomatoes to the farm undressed and tried to assault me. I screamed, he got scared and left. I informed the employer, who then fired him. One of the participants in FGDs

Some Syrian female farmers mentioned experiencing extortion from Egyptian farmers. A Syrian woman disclosed that she pays an Egyptian farmer money to prevent him from making sexual jokes and harassing her at work.¹⁴⁵

It appears that some Jordanian female farmers experience sexual harassment but do not report it due to social stigma. One of them expressed, "I could lose my job, but I won't disgrace myself or my family by reporting the harassment against their daughter. This is what we face; Jordanian women are forced to remain silent." ¹⁴⁶ The rest of the female farmers also chose to remain silent, showing an unwillingness to discuss the topic as if it were a forbidden taboo. This reluctance to speak out explains the low reported rates of sexual harassment in many Arab studies within patriarchal societies, due to the sensitivity surrounding the issue in its various forms.

3.3.4 Mechanisms of Complaint and Reporting

The previous discussions by the farmers contain many difficulties faced by society that hinder its progress in combating violence, including the absence of clear mechanisms for complaints, fear of losing their jobs, and lack of media coverage for successful complaint cases by farmers, which often forces them to remain silent about violence and discrimination, endangering their mental health. Reporting and complaining about the problem and seeking help contribute to alleviating fear, anxiety, tension, and stress, but harboring these feelings without expressing them poses a real danger to the mental and psychological well-being of agricultural workers. The study's results, according to participants in focus group discussion sessions, indicate that the system is confusing, and there are no support structures to help workers navigate the formal mechanisms for filing complaints. Even if they succeed in filing a complaint, the outcome does not significantly benefit the worker.

The absence of written contracts in the agriculture sector makes it difficult for workers to get official help in cases of disagreements with or mistreatment by employers, as they do not have official documents proving their employment or wage arrangements, putting them in a very difficult position to defend their labor rights. The results show that it is very difficult for workers to file complaints about their treatment on the farm, as the survey study results show that 70% of the workers are unable to file a complaint against the employer and 95% of the workers say there is no way to file an official complaint against the employer.

3.4 Occupational Health and Safety

Research findings suggest that agricultural male workers face a higher risk of accidents compared to their female counterparts, largely due to the hazardous nature of certain tasks they perform. Echoing this, a participant in the focused discussion sessions remarks, "Men encounter more severe accidents than women, particularly because their tasks like tree climbing increase their risk of falls." ¹⁴⁷ Nonetheless, work-related health issues are commonly experienced by both genders. As one participant notes, "Both male and female farmers generally suffer from similar health issues such as dizziness, exhaustion, and breathlessness." ¹⁴⁸ Identifying gender-based differences in the workforce is crucial to ensure that workplaces are safe and healthy for all. This is particularly important in the development and implementation of standards, laws, and operational measures aimed at mitigating and managing risks.

3.4.1 Accidents, Injuries, and Diseases That Male and Female Farmers are Exposed at Work

The findings indicate that male and female farmers experience a range of work-related injuries and illnesses that arise in the course of and as a result of their farm work:

1. Fractures and Spinal Injuries

A participant in the study remarks, "Agricultural work is challenging as fractures are a common occurrence." ¹⁴⁹ Moreover, the study highlights a case where a Syrian farmer became paralyzed after an accident. An individual recounts, "My Syrian co-worker fell from a ladder while picking peaches, leading to his paralysis." ¹⁵⁰ Additionally, incidents of head injuries are reported. Another participant shares, "My colleague stumbled and fell, losing consciousness. We immediately took her to the hospital, where she was diagnosed with a concussion." ¹⁵¹

2. Bites and Injuries Caused by Animals

In the focus group discussions, a significant number of participants highlighted that snake bites are a common hazard for both male and female farmers. A participant stated, "Farmers frequently encounter venomous snake bites." ¹⁵² Another participant recounted a tragic incident where her neighbor, a farmer, died from a bite by a viper. She explained, "My neighbor was bitten by this snake, and, despite intensive care, she couldn't survive." ¹⁵³ Additionally, several participants pointed out their experiences with insect bites, with one remarking, "We often get bitten by insects such as bees, wasps, and scorpions." ¹⁵⁴

> I was electrocuted due to exposed wires One of the participants in FGDs

In the agricultural sector, farmers frequently face diseases spread by animals. Rat bites, for instance, often lead to bacterial infections causing symptoms like fever and muscle pain. A farmer recounts, "I suffered from a bacterial infection due to a rat bite." ¹⁵⁵ These incidents expose them to various diseases, such as Loukas fever, bovine fever from direct animal contact, and the pneumonic plague, a severe, flea-borne bacterial disease.

Particularly in livestock farming, workers are susceptible to diseases like brucellosis, a bacterial infection common among cattle, sheep, goats, and camels. A Jordanian farmer shared his experience: "I caught brucellosis and paid for my treatment out of pocket, unnoticed by the farm owner." ¹⁵⁶

Farmers working in animal production are also exposed to injuries caused by animal attacks. In this regard, one of the participants says, "A cow kicked me, and I stayed at home for a month and a half." ¹⁵⁷

3. Chronic Diseases

A farmer shared an incident saying, "A fellow farmer suffered a heart attack. We rushed him to the hospital, but he unfortunately passed away." ¹⁵⁸ The study also reveals that the stress and pressure associated with farm work can lead to arterial sclerosis and increase the risk of strokes, as highlighted by one of the female participants. ¹⁵⁹

4. Various Physical Injuries Such as Joint Dislocations, Sprains, Contusions, Muscle Ruptures, and Herniated Discs

The study highlights that both male and female farmers frequently encounter injuries like falls, dislocations, and sprains. A participant shared, "Ankle sprains are common for me, and we often get bruises and dislocations on the farm." ¹⁶⁰ Another mentioned, "A muscle tear incapacitated me for four months, and I received no compensation." ¹⁶¹

Half of the participants reported that the majority of injuries result from falling into water pools and slipping on mud. One of the female farmers says, "In winter, injuries from falls due to mud and water pools increase." ¹⁶²

The use of heavy machinery in agriculture, such as tractors and harvesters, heightens the risk of back and spinal injuries. Moreover, the physical effort needed in handling farm animals can be strenuous and unpredictable, increasing the likelihood of injuries, as expressed by a worker who suffered a disc herniation due to the demanding nature of the work "Our work requires physical effort, which caused me to slip a disc." ¹⁶³

5. Eye Injuries

Farmers frequently experience eye injuries caused by prolonged exposure to sunlight and from debris like stones and dust. A participant in a focus discussion session shared, "Occasionally, our eyes get injured from stones thrown by the agricultural tractor, necessitating a visit to the doctor at times." ¹⁶⁴

6. Burns and Injuries Caused by Heat

The study shows that prolonged exposure to the sun during farm work leads to skin burns among farmers. A female participant noted, "Working in the intense heat of the Jordan Valley during summer increases our risk of sunburns." ¹⁶⁵ Additionally, another female participant remarked, "Long hours under the sun often result in dizziness, sunstroke, and extreme redness of the skin." ¹⁶⁶

7. Exposure to Electric Shock

Improper and non-standard wiring in farms is one of the main causes of accidents. One of the participants says, "I was electrocuted due to exposed wires." ¹⁶⁷

8. Wounds

Farmers, both men and women, are exposed to various types of wounds while using agricultural equipment and work tools:

A. Puncture Wounds

Farmers experience puncture wounds when using knives and sharp instruments such as scissors. These wounds are typically small and deep, making them hard to detect and increasing the risk of complications. Foreign materials can get lodged in these wounds, leading to serious infections like tetanus. A female participant shared, "While we often get minor cuts from pruning, I once suffered from tetanus, marked by intense muscle spasms that began in my mouth and neck and spread through my body, accompanied by a fever." ¹⁶⁸

B. Lacerations

Lacerations are often caused by sharp implements like knives, metal sheets, and different saws. These injuries are marked by significant bleeding and can sometimes be so severe as to necessitate the complete amputation of the injured part. A female participant noted, "Men usually get deeper wounds from saws, particularly when trimming banana trees. I recall an incident where a co-worker had his finger amputated." ¹⁶⁹ Another participant mentioned, "We also get deep wounds from using scissors." ¹⁷⁰

9. Injuries Resulting from the Use of Chemicals (Poisoning)

According to survey findings, 10% of male farmers have been poisoned by chemicals, particularly sulfur. A farmer shared, "We frequently use insecticides and fungicides, which often give me headaches. I once had diarrhea, and was informed that it's a common reaction to inhaling pesticides. Since then, I've made sure to wear a mask during spraying." ¹⁷¹ Another recounted, "I forgot to wear gloves while applying pesticides to trees once, resulting in severe burns on my hands, causing intolerable pain." ¹⁷²

10. Physical Injuries

Physical hazards in the workplace encompass elements that jeopardize worker health and safety, including heat, cold, noise, vibrations, harmful radiation, and electrical risks. ¹⁷³

Farmers often endure mechanical vibrations from equipment, which are caused by oscillations from machinery that pass from the hands to arms and then throughout the body. ¹⁷⁴ These effects are frequently underestimated. A farmer shared, "Due to operating an olive picking machine, I develop open sores on my hands and wrists, sometimes losing sensation in those areas." ¹⁷⁵

The impact of vibration extends beyond discomfort. Prolonged exposure can lead to serious health issues, including back pain, carpal tunnel syndrome, vascular diseases, bone damage, and muscular disorders. ¹⁷⁶ Despite the risk, there are no legal standards to mitigate vibration exposure. While methods to reduce this risk exist, they are not commonly implemented on farms.

3.4.2. Extent of Employers' Compliance with Occupational Safety Standards in Their Farms

Reported injury rates among workers fall short of revealing the actual situation of occupational injuries and diseases, as these figures often downplay the true extent of the issue, partly because many cases go unreported. Both male and female workers encounter distinct health and safety challenges, which are influenced differently by their working conditions. Their experiences with preventive measures and responses, such as training and compensation, also differ. Upon inquiring about employers, compliance with occupational safety regulations on farms, it was discovered that their efforts are minimal and fail to align with global health and safety standards:

A. Material Factors

The results revealed the existence of material factors related to the technological environment of the workplace. These sources and machines pose risks due to deficiencies in design, manufacturing, or specifications. One person said, "We have fire extinguishers on our farm but don't provide face masks. We used to because of the COVID situation." ¹⁷⁷ Another expresses surprise, "Our mothers used to work in agriculture without any protective measures, to the extent that some of them would give birth on the farm." ¹⁷⁸ However, the results also show that some accidents occur due to negligence and shortcomings on the part of farm owners. One of them says, "Many accidents happen due to the lack of fencing around water pools, and farmers need help to get out of them, which is why I put up fences around the pools." ¹⁷⁹ When asked about regular maintenance procedures, all the participants stated that they perform maintenance only when necessary or when machines break down, not as a regular routine. ¹⁸⁰ One, reflecting the majority opinion, says, "When a machine on the farm breaks down, I do the necessary maintenance." ¹⁸¹ Maintenance work involves not just checking electrical connections and electrical equipment, but also dealing with negligence in electrical installations, often due to non-professionals, as one participant pointed out. ¹⁸²

The consideration of employers for occupational safety rules on farms is nothing but modest attempts that do not rise to international health and safety standards From Study Findings

The results, agreed upon by participants in focus group sessions and by 72% of workers in the survey study, indicate that they do not receive personal protective equipment and point out the absence of safety tools on farms. Workers bear the cost of acquiring these themselves, which include:

- Respiratory protection equipment like cotton masks: one of them said, "I bring my own mask at my expense." ¹⁸³
- Hand protection equipment: one of them said, "We pay for our own gloves." ¹⁸⁴
- Foot protection equipment: one of them said, "We bring long plastic boots to work to protect against snake bites." ¹⁸⁵

The results show a lack of availability of other personal protective equipment that could protect/reduce the range of risks farmers may face, such as natural, mechanical, and chemical hazards. These include head protection equipment like helmets, face protection equipment when spraying crops with insecticides made of transparent plastic or glass, eye protection equipment from the risk of flying stones and dust usually made from polyvinyl chloride (PVC), masks used to protect against toxic fumes from spraying insecticides, and protective overalls for the body against chemical substances.

The results also indicate the absence of fire extinguishers on farms to combat potential fires, with only one farm having them but without training farmers on their use. It was found that employers do not prioritize providing medical first-aid equipment in their workplaces in proportion to the nature of work or the number of workers, with only 11% of workers reporting their availability on their farms. Despite 78% of workers who have first-aid kits reporting the presence of a trained person, this offers little benefit as most farms lack the appropriate medical equipment on-site to treat injuries, often having only a basic firstaid kit lacking many necessary medical supplies. In this regard, one of them says, "We don't provide firstaid equipment; if an injury occurs, we transport them to the hospital." 186

In addition, there is a lack of awareness about safety guidelines for hazardous chemicals and a complete absence of any safety documentation model like the one prepared by the American National Standard Institute. The results also highlight the lack of training for farmers in prevention and the use of safety measures, and in recognizing potential hazards they may face. One of the participants says, "No one cares about training us on hazard prevention or even how to administer first aid." ¹⁸⁷ Only one participant mentioned receiving training, saying, "I received one-time safety training from the U.S. Agency for International Development." ¹⁸⁸

Despite the significant importance of training and developing preventive and health awareness among farmers in the field of work hazard protection and accident reduction, which is one method of prevention, the professional experience gained by older workers, as indicated by the accumulated experience in this field, does not have a significant impact on reducing the number of work accidents and injuries they experience compared to the accident rates of new workers who have received prior professional training. The work accident results show that workers with extensive experience are almost as likely to have work accidents as less experienced and skilled workers, due to various personal factors that directly affect their safety. The most important of these is that experienced workers become less careful in taking customary protective measures when performing dangerous tasks, feeling overconfident in their abilities to act appropriately, which can lead to life-threatening work accidents. This was pointed out by one of them: "In agriculture, accidents don't decrease over time, so it's always important to be careful with safety equipment." 189

3.5. Challenges Faced by Farm Owners

The main climate-related risks to the agricultural sector include rising temperatures, decreased and erratic rainfall, seasonal variations, heatwaves, and extreme weather events, especially heavy rainfall or droughts. These risks are likely to have several negative effects on the sector, such as reduced productivity of rain-fed and irrigated crops, livestock production, and beekeeping. Additionally, climate change is expected to lead to soil fertility decline, contraction of agricultural land available for farming and grazing, and threaten livelihood options that depend on natural resources, leaving individuals more vulnerable to the impact and risks of livelihood insecurity. Poor households and their members are considered more susceptible to climate impacts. ¹⁹⁰

Many farmers in the Jordan Valley and participants in intensive discussion sessions have already observed shifts in rainfall patterns, along with unprecedented high temperatures during the summer and frost in the winter, all negatively affecting seasonal crops in the Jordan Valley. ¹⁹¹ Furthermore, Jordan faces soil quality issues that have been partially exacerbated due to climate change, and soil salinity has increased in the Jordan Valley in recent years, posing a greater risk to soil quality and agriculture sustainability in the long term. ¹⁹² The impact of these climate challenges has been felt among farmers in Jordan, who face increased input costs alongside decreased crop yields due to poor soil quality. In the Mafraq Governorate, one of the key agricultural centers in Jordan, the cultivated land area has decreased by 50% since 2015 due to climate change and resulting economic pressures.¹⁹³

Climate challenges, such as rising temperatures and changes in rainfall patterns, have posed water supply challenges and have impacted Jordan's water security, with agricultural implications and financial burdens on Jordanian farmers. Decreased rainfall has forced many farmers to rely more on alternative water sources and reduce the land available for cultivation. Participants in intensive discussion sessions with farmers in Mafrag pointed out that water scarcity poses a significant obstacle to farmers, leading to problems in securing water. Survey data collected during this study support these trends, with 60% of surveyed farmers indicating that they purchase additional water from the market to meet their agricultural needs. Additionally, 29% of surveyed farmers reported extracting groundwater using wells, with crop farmers being more likely to use groundwater extraction compared to livestock farmers. Furthermore, 10% of employers mentioned planning to dig additional wells on their lands, further increasing the pressure on groundwater resources and adding financial burdens to secure stable water supplies for agricultural production.

The water shortage also affects soil quality; excessive drought conditions will lead to the deterioration of soil fertility and pose more risks to sustainable agriculture and long-term soil quality, such as increased salinity levels. As a result, farm owners cannot afford the cost of good fertilizers to combat these deteriorations in soil quality, which either leads to decreased production or farmers using low-quality fertilizers that also harm their production. These conditions have led to 8% of farm owners reducing the number of dunams they cultivate, according to a survey of farmers. $^{194}\,$

Farm owners in Jordan face significant financial challenges as the costs of maintaining their farms exceed the income they earn from selling their products. Survey results and qualitative data show that farm owners struggle to sell their products in the market, with 64% of farmers in the survey stating that they find it difficult to sell or export their products. Labor costs remain the largest expense for owners of plant production farms, followed by seeds and water, while labor costs are the lowest for animal production owners. However, despite increased costs for farm owners, the prices of many agricultural products remain low, causing them to incur significant losses in the market due to decreased demand for products, often forcing them to lower their prices to the minimum level needed to find buyers. ¹⁹⁵

The COVID-19 pandemic has harmed the agricultural sector, and many farm owners have not financially recovered from the economic shock of the pandemic, as many were unable to export their products abroad during the pandemic when they saw decreased local demand. As a result, there was a lot of wasted agricultural produce, and farm owners incurred significant losses, with many unable to recover from these losses.

Transportation and market organization add an additional financial burden on farm owners. 56% of farm owners surveyed reported difficulties in marketing their products to consumers and struggled to transport their products to the market because the main central market for agricultural products is located in Amman, and they must pay commission fees to the Amman Municipality to sell their goods. Although other governorates have central markets, they are not open in all seasons. Farm owners are not only financially responsible for the cost of transporting to central markets, but when their products reach the market, they must also pay a commission to a third party who sells their products on their behalf. It is also common for these external sellers to steal profits from farm owners and not inform them of the amount earned, then take their percentage from this figure to extract more profits.

Farmers do not receive sufficient support to overcome these challenges. Institutionally, the dissemination of information to farmers and farm owners regarding technological and market guidance has not been sufficient, and many have reported a need for more reliable information and initiatives related to water use efficiency and general agricultural labor, such as the recent application of treated sewage water in irrigation. Farm owners reported that poor cooperation between ministries led to weak laws, regulations, and market information relevant to agricultural operations, as competing goals between ministries and conflicting sectoral policies sometimes lead to delayed legal approval and slow decision-making for farm owners trying to manage or change operations.

One expert in in-depth interviews pointed to the complexity of government procedures related to the agricultural sector as a major challenge facing business owners in Zarqa Governorate, "There is pressure on agricultural work, and there is no government assistance, for example, there are violations on wells that were built 30 years ago and their operation is stopped despite the well's productivity, which negatively affects the growth of the sector." ¹⁹⁶

In addition, agricultural development services have declined in recent years, and consequently, farm owners do not have the same level of access to expertise and quality information necessary for effectively managing their farms. For example, in the Mafraq region, there are not enough agricultural research stations and staff to help farmers implement new solutions to address their problems. According to survey results, only 13% of farm owners collaborate with agricultural research centers or cooperatives, and only 20% of farm owners reported having a farmers' union that represents the needs of their projects'/agricultural production. The farm owners participating in focus group discussions emphasized their desire to collaborate with agricultural researchers to provide more guidance on how to respond to new challenges, but this collaboration is limited or nonexistent. ¹⁹⁷

These challenges define the working relationship between farmers and employers, as the agriculture sector is mostly organized through informal labor relationships, verbal contracts, and discussions between the two parties. The study's findings indicate that these informal arrangements largely stem from the fact that farm owners cannot afford to employ full-time workers, leading to two sets of circumstances. First, some farm owners choose to leave the agricultural sector entirely. Second, farm owners transfer production responsibilities to workers, where work-

> There is pressure on agricultural work, and there is no government assistance One of the experts in the in-depth interviews

ers are responsible for planting, harvesting, packing, transporting the farm's crop to the market, and selling the products, with the farm owner receiving an agreed-upon percentage of the profits. ¹⁹⁸

Delays in paying workers' wages often result from farm owners receiving very little profit and lacking the liquidity to pay their workers if they cannot sell their products, making it likely that workers will not receive their wages or experience delayed payments. Farm owners also described how they are unable to afford social security payments, which is why they either do not register their workers for social security or discourage foreign workers from applying for work permits to avoid additional financial responsibilities. To maintain their farms' operations, farm owners prioritize paying bus drivers, government municipalities, and external partners like brokers, as well as agricultural inputs, before they can pay their workers' wages. For these reasons, the wages of agricultural workers remain unstable and low. ¹⁹⁹

The economic reality facing farmers casts doubt on the effectiveness of government monitoring and legal intervention, as these policies do not directly address the financial and climatic challenges of farm owners, making production unprofitable and thus making working conditions more difficult for their workers. However, policies that aim to improve transportation logistics, regulate the methods of selling agricultural products, and facilitate the movement of crops grown in Northern Jordan to the rest of the country will alleviate their financial burdens and encourage the sec-

4. Recommendations

Based on the previous findings, the study recommends the following reforms to improve decent work for agricultural workers and promote a more sustainable agricultural sector in Jordan:

1. Increase awareness of the legal rights of workers and provide opportunities for training

- Organize information sessions with workers and provide legal awareness on how workers can file complaints against employers in case of contractual rights violations, and establish a referral and awareness system for agricultural workers so they can contact the Ministry of Labor, legal services, or human rights organizations and obtain affordable consultations.
- Conduct workshops between employers, agricultural workers, and relevant ministries such as the Ministries of Labor and Agriculture to identify areas of understanding and mutual cooperation where all parties can take practical steps to improve working conditions in the agriculture sector and raise government bodies' awareness of labor rights issues facing agricultural workers.
- Regularly update training programs to keep up with modern developments in agriculture and agricultural technologies that focus on environmentally friendly and sustainable agricultural practices.
- Develop training programs focusing on safe and healthy agricultural practices for workers in the agricultural sector and develop the necessary human skills for working in the agricultural sector, such as social skills and communication skills.

2. Provide decent working conditions for agricultural workers in accordance with internationally recognized standards

- Expand the social security and health insurance system to include all workers in agriculture, regardless of nationality.
- Expand efforts to monitor violations, sexual harassment, child labor, and worker injuries to improve transparency and accountability, and draft sector-level responses to these types of labor issues. Transform working conditions in the agricultural sector from responding to labor violations to active monitoring and implementing preventive measures that protect workers and improve their work environment, in addition to improving legal enforcement and government inspection processes for farms to ensure farm owners comply with all labor laws and reduce labor violations.
- Invest in public transportation in rural communities so workers have greater freedom of movement and can leave the farm at any time in an emergency without relying on unreliable and potentially unsafe transportation to their homes or the hospital in case of injury.
- Pursue projects supporting the agricultural sector, implement laws and legislation to protect agricultural resources, and expand the use of available natural resources while preserving and sustaining them.

- Amend Article 98 of the Labor Law to allow all female and male workers to establish their trade unions, without relying on the professional classification system issued by the Minister of Labor, and in accordance with related international labor standards that ensure freedom of union organization, as it is an effective tool in defending and protecting the interests of female and male workers and a fundamental guarantee for the application of labor standards.
- Address the issue of workers in the informal sector, as formalizing these workers is essential to protect them from falling into poverty, and the Ministry of Labor should limit informal work by issuing appropriate instructions for agricultural workers and reviewing their instructions as needed.
- Activate the system for agricultural workers after its suspension and stoppage, which is a qualitative step to enhance the environment of decent work and improve working conditions for thousands of male and female workers in the agricultural sector, and raise productivity levels in it.

3. Improve agricultural production for farm owners and expand economic growth opportunities in the agriculture sector

 Improve the capacity-building of agricultural cooperatives to help farmers manage their operations, and expand the role of universities and researchers to collaborate with farmers and provide consultations to improve agricultural efficiency and increase productivity.

- Invest in new agricultural technologies that save water, reduce energy consumption, and improve agricultural efficiency, encourage organic farming for export purposes and obtaining quality certifications, and establish an innovation fund for agriculture, food, energy, and water to stimulate development.
- Develop policies related to the agricultural sector, such as consumer protection law and the system of organizing and managing the Ministry of Industry and Trade, and develop the logistics chain (transportation, storage, and marketing) to reduce the costs of transporting agricultural products to central markets and marketing them.
- Provide financing opportunities and promote financial inclusion for farmers that are accessible for workers or farm owners who want to expand their farms or start new businesses to enhance growth and innovation in the agriculture sector.
- Reorganize the market without relying on a third party, reducing the cost of selling agricultural products and allowing farm owners to use their profits to invest in their agricultural operations.

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