

When the land dries up... Jordanians victims of climate change and lack of labor rights

Report by Bayan Sabha

In the heart of the Humaymat Desert in southern Jordan, where the Nabataeans immortalized their ingenuity by inventing water harvesting systems that still bear witness to their genius, today's reality raises a painful question: How did a land that was once rich in water turn into a wasteland?

This is where Abu Khaled was born in 1968. Since 1989, he has lived a self-sufficient life on 25 dunams of land inherited from his ancestors. At that time, Nabataean ponds collected rainwater, which was enough to water 100 sheep and his olive, grape, and pomegranate trees, in addition to growing wheat, barley, and chickpeas. Recalling those days, he says, "We lived off our land... we ate what we grew and drank rainwater."



"Image source: Al-Hamima Al-Abbasiya Tourism Association Archive"

At the dawn of the new millennium, the land that was once abundant with water began to show signs of drought. Reports from the United Nations Environment Programme

(UNEP) and national climate reports confirm that rainfall in Jordan has decreased by approximately 20% over the past three decades, as documented by national climate reports issued by the Jordanian Ministry of Agriculture and the Meteorological Department (Climate Change in Jordan Report, 2022). Meanwhile, the Intergovernmental Panel on Climate Change (IPCC) indicates that temperatures have risen by approximately 1.5 degrees Celsius in recent decades. These climate changes are not just numbers, but a reality experienced by people on the ground, including Abu Khaled, who owned a herd of 100 sheep and was forced to sell his property after his land lost its productivity. He left his home and land and moved with his wife and five children to the Al-Qura'a district in the southern province of Aqaba. Sadly, his story is not an isolated case, but a vivid example of the many families in these areas who have been forced by water scarcity and declining soil fertility to migrate and completely change their lives.



"Image source: Al-Himima Al-Abbasiya Tourism Association Archive"

But the move was not just a change of location; it was the collapse of a way of life. In Al-Qura, Abu Khaled faced costs he had never known before: rent for a cramped house, school fees for his children, and daily bills. To cover these costs, he tried to work in construction but was unable to find stable employment. He was then forced to work on

farms alongside his wife, sometimes with the help of his sons, two of whom left school to help their father cope with the pressures of life.

Climate change and an unregulated economy

Abu Khaled says that the Al-Qura area experienced a remarkable boom in 2011 after the drilling of artesian wells, which turned it into a center for intensive cultivation of crops such as potatoes and tomatoes, managed by major Jordanian companies. For this reason, he decided to move there in search of work. However, this agricultural boom was accompanied by clear exploitation of workers, as the "contractor" charged companies 15 dinars per day for each worker, while paying them only 7 dinars, for working hours that stretched from 4 a.m. to 5 p.m., according to his account—which is more than double the legal limit allowed under Jordanian labor law, set at eight hours per day.

Abu Khaled points out that working conditions were harsh: long hours, low wages, and no social security, health insurance, or legal protection. Public safety conditions were also virtually non-existent in the agricultural work environment. In his words: "We work long hours in a hot environment, which causes obvious physical fatigue, and often there was not enough personal protective equipment such as gloves or protective clothing, which made the work even more difficult."

Today, Abu Khaled is 59 years old and still works in agriculture for a modest daily wage. He recalls that his family received 100 dinars per month in social assistance from the Ministry of Social Development, but this did not cover their rising living costs. His children did not complete their education due to economic pressures, and he feels that their future has been lost, just as his land has been lost. Nevertheless, he says with a voice full of hope: "If I returned to my land, even if I had to endure two difficult years, I would live with dignity and self-sufficiency."

Abu Khaled's story reflects a reality experienced by many residents of Jordan's rural areas and villages: internal climate migration. It is a vivid example of how climate change can drive families to displacement and bring them into direct confrontation with the informal economy, where vulnerability intersects with exploitation.

Although there is no accurate official data on the number of people internally displaced by these factors, or the areas most affected, the experiences of individuals such as Abu Khaled confirm the existence of the phenomenon on the ground. This is supported by a study published by the International Organization for Migration ([IOM](#)) entitled "Human Mobility in the Context of Climate Change, Environmental Degradation and Disaster Risk" for 2025, which indicates that climate change and environmental degradation in Jordan—including rising temperatures, water scarcity, and declining soil fertility—are contributing to increased internal displacement of populations in rural areas.

The study explains that these shifts not only affect the land and agriculture, but also push families into informal work environments, where legal protections are absent and opportunities for exploitation increase. This highlights the urgent need to collect accurate data on the conditions of affected families and agricultural workers. FAO data indicate that informal work accounts for the majority of agricultural jobs in the region.

Facing greater challenges

Abu Khaled's story is not just an account of an individual's life, but a reflection of a broader reality: climate migration is shifting from a choice to a reality imposed by climate change and increasing drought. This reality confirms that environmental challenges do not stop at nature's boundaries, but extend to social, legal, and economic dimensions that make internal displacement both a humanitarian and security issue.

Data from the World Bank report "Climate-Smart Agriculture Action Plan for Jordan" indicates that the historic decline in water resources will accelerate in the coming years, with rainfall expected to decrease by an additional 10% by 2030, accompanied by a significant increase in droughts and desertification. These climate shifts will deepen pressures on agriculture and pastures in the most fragile areas, compounding the burdens on families who depend on agriculture as their primary source of livelihood.

Abu Khalid's story thus transcends the local issue, reflecting what communities around the world may face if the climate crisis, which causes forced displacement, land loss, and labor exploitation. These are all interrelated phenomena that form a complex network of challenges that cannot be solved in isolation from one another.

Understanding climate migration as part of a broader system of environmental and

social phenomena underscores the fact that "the climate crisis is not only an environmental crisis, but also a humanitarian, economic, and legal crisis that requires everyone to work together,", according to Mohammed Al-Farajat, professor of hydrogeology, environmental geology, and geophysical exploration at Al-Hussein Bin Talal University.

In this context, there is a pressing need for change and for solutions that integrate science, law, and sustainable development to redefine the relationship between humans and their environment. Taking action now is not a luxury, but a necessity to ensure that the earth we leave to future generations is livable, and that the rights and protections we guarantee them are a reality and not a distant dream.

Al-Farajat explains that climate maps show a clear decline in rainfall in the south of the Kingdom, where the average in Al-Humaymah and Al-Qura has fallen to less than **50 mm per year**, down from more than **70 mm** decades ago. The relatively humid northern regions have also begun to gradually shift **to** a semi-arid climate, reflecting the seriousness of rapid climate change. This scarcity of water resources has had a direct impact on the traditional lifestyles of the population. With the shrinking of natural pastures and rising rates of desertification and drought, livestock breeding activities have declined significantly. In addition, the depletion of some wells and lower rainfall rates have weakened seasonal agriculture, which was a major source of income for many rural families.

With dwindling opportunities to remain in rural areas and the countryside, increasing numbers of people have migrated to major cities such as Amman, Irbid, Zarqa, and Aqaba. However, this migration often results in more precarious living conditions, where newcomers often work in low-paying jobs, often below the legal minimum wage and with long working hours that exceed the permitted limits. This, in turn, exacerbates their social and economic conditions and makes them vulnerable to exploitation in the unregulated labor market. Dr. **Al-Farajat** also pointed out that the decline in groundwater levels in the region, especially in major reservoirs such as **the Ram Group** reservoirs, has exacerbated the traditional irrigation crisis and reduced the chances of sustainable agricultural production.



"Image source: Al-Hamima Al-Abbasiya Tourism Association Archive"

Al-Farajat explains a set of proposed solutions to adapt to climate change and protect rural communities from the effects of climate migration, noting that the most prominent of these solutions are: Developing modern irrigation techniques such as drip irrigation and smart farming in cooperation between the Ministries of Water and Irrigation and Agriculture, and adopting drought- and salinity-resistant seeds in coordination with local and international research centers. It also proposes enhancing rainwater harvesting through the construction of small dams and the restoration of historic Nabataean pools, and supporting the stability of local populations by improving basic services such as water, electricity, and education, thereby reducing the incentives for migration. Al-Farajat emphasizes that the success of these measures requires integrated implementation based on accurate scientific data and continuous coordination between the relevant institutions to ensure that rural families are protected from slipping into poverty, informal work, or exploitation.

"Double victims"

With drought and desertification continuing in Jordan, farming families face not only declining water resources, but also a legal vacuum that leaves them vulnerable to exploitation and loss of their rights. While Al-Farajat observes the continuing deterioration of agricultural land and pastures, Dr. Ali Al-Hamouri, a specialist in international law and human rights, explains that internal climate migration still has no legal definition in either Jordanian or international law, which places displaced persons in two categories: "irregular workers" and "displaced persons" in the legal sense. This gap exacerbates the vulnerability of affected families and makes coping with the effects of climate change more complicated.

Families displaced by climate change who find work on farms or in workshops are treated legally as irregular workers, even though Jordanian Labor Law No. 8 of 1996 and its amendments guarantee basic rights such as wages, working hours, leave, and occupational health and safety. However, these rights remain unguaranteed in practice due to the absence of formal contracts, which opens the door to exploitation of this group. He adds that the conditions surrounding climate-related labor, such as the absence of contracts, low wages, and long working hours without compensation, may come close to the definition of forced labor according to the standards of the International Labor Organization and the Palermo Protocol, especially when elements of exploitation and economic coercion are present, along with the lack of social security coverage for displaced workers and the absence of effective monitoring mechanisms in rural areas, despite Jordan being a party to important international conventions, such as the Forced Labor Convention of 1930, the Abolition of Forced Labor Convention of 1957, the Palermo Protocol of 2000 to combat human trafficking, and the Paris Agreement of 2015, which links climate justice to the responsibility of major countries. However, the lack of legal recognition of internal climate migration renders these commitments indirect and leaves this group in a vulnerable and unprotected position.

Dr. Al-Hamouri believes that the solution lies in comprehensive legislative reforms, starting with the introduction of the term "internal climate migration" into labor law or the adoption of specific legislation, with employers in the agricultural sector and small workshops being required to provide simplified written contracts. strengthening labor inspections in rural areas, and integrating this group into social protection systems such as the National Aid Fund and the Takaful program. He also stresses the need to formulate clear national policies linking climate change, internal displacement, and social justice.

It also describes climate-displaced workers as "double victims," as they have lost their livelihoods due to climate change and are simultaneously exposed to legal and economic exploitation due to a lack of protection. Dr. Al-Hamouri stresses that the lack of a legal definition of internal climate migration is the biggest obstacle to protecting thousands of workers, and that adopting a comprehensive humanitarian legal approach based on international standards is the way to promote both climate and social justice

and give the most vulnerable groups the recognition and protection they have long awaited.



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A study in the World Bank report "**Climate-Smart Agriculture Action Plan for Jordan**" indicates that this historic decline in water resources will accelerate in the coming years, with rainfall expected to decrease **by an additional 10% by 2030**, along with a significant increase in droughts and desertification. These climate shifts will deepen pressures on agriculture and pastures in the most fragile areas, compounding the burdens on families who depend on agriculture as their primary source of livelihood. Abu Khaled's story is more than a local issue; it is a mirror of what communities around the world may face if the climate change crisis is not taken seriously. Forced displacement, land loss, and labor exploitation are all phenomena that overlap to form a complex web of challenges that cannot be solved in isolation. Understanding climate migration as part of a broader system of environmental and social phenomena broadens our understanding and presents us with a clear reality **"The climate crisis is not**

only an environmental crisis, but also a humanitarian, economic, and legal crisis that requires everyone to work together."

In this context, stories like Abu Khaled's become a call for change, for solutions that integrate science, law, and sustainable development and redefine the relationship between humans and their environment. Acting now is not a luxury but a necessity to ensure that the earth we leave to future generations is livable and that the rights and protections we guarantee them are a reality and not a distant dream.

Sources:

1– Interview with a member of a displaced family in the south of the Kingdom (the case).

2– Interview with Prof. Dr. Mohammad Al-Farajat, Professor of Hydrogeology, Environmental Geology, and Geophysical Exploration at Al-Hussein Bin Talal University.

3– Interview with Dr. Ali Al-Hamouri, specialist in international law, human rights, and national and international environmental legislation.

4–<https://www.climatecentre.org/wp-content/uploads/RCCC-Country-profiles-Jordan-2022-Final-1.pdf>

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8–World Bank Report: [Climate-Smart Agriculture Plan in Jordan – 2022](#)

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