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Tunisia's Climate Crisis, Economic Downturn, and Growing Dependency on Algeria

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Over the past fourteen years, Tunisia has undergone significant political shifts, including the democratization process that followed the 2010–2011 Arab Spring, the democratic breakdown following [President Kais Saied's power grab in 2021](#), and, most recently, the unfolding of a chaotic authoritarian restoration process. However, one critical dynamic has received less attention: a [climate crisis](#) that has been compounding the [country's turbulent political trajectory](#). Since 2017, Tunisia has experienced intensified climate change effects, including severe drought, a [sharp decline in the water levels](#) of transboundary rivers flowing from Algeria into Tunisia, and a [dramatic reduction in water reserves](#) in the country's dams. These factors have led to widespread water and food insecurities, causing significant degradation in farming and livestock breeding, particularly in the regions bordering Algeria.

However, the climate crisis is not solely responsible for the deepening crisis. Saied's governance failures have exacerbated Tunisia's long-standing vulnerabilities. These failures have contributed to [food shortages](#), inflation, and increased smuggling of cattle and

food products into and from Algeria. The regime's dysfunctional regulatory measures in particular have worsened food dependency, while financial constraints have deprived Tunisia of the means to adapt to climate change, support its deteriorating agricultural sector, and preserve its sovereignty. In effect, Tunisia's worsening food insecurity has amplified the power imbalance between Tunisia and Algeria, increasing the latter's geopolitical leverage over its weaker and increasingly dependent neighbor. This dependence has aggravated Tunisia's marginalization both regionally and globally and forced it to align closely with Algiers.

Climate Change and Smuggling From Tunisia to Algeria

Since 2017, Tunisia has experienced years of severe drought, driven by declining rainfall and a sharp drop in water reserves in dams, [from 50 percent in 2019 to 23 percent in 2024](#). This climate crisis, marked by prolonged droughts, has increased the difficulties faced



by livestock farmers in the country's interior regions. Confronted with substantial losses due to rising fodder prices and the [inadequacy of government-controlled milk sale prices](#), thousands of farmers and livestock breeders have gradually abandoned the sector.

The [livestock sector crisis has deepened over the years](#), leading to a surge in protest movements. Livestock breeders have [repeatedly protested](#) the growing disparity between the rising cost of milk production and the low selling price imposed by authorities to protect consumers' purchasing power, often at the expense of rural livelihoods. In 2022, the crisis reached a boiling point after fodder production companies raised prices. The war in Ukraine drove up the cost of soybeans and corn, leading to a spike in the price of livestock feed. The [price of a ton of feed](#) rose to 300 dinars (\$100), while a 50-kilogram sack rose from 48 dinars (\$16) to 79 dinars (\$27), triggering widespread protests across Tunisia.

The demonstrations greatly affected the northwest regions on the border with Algeria. Farmers blocked roads with their livestock and camped outside production plants for entire nights to demand a higher milk price. Some farmer-breeders even threatened to dedicate their entire plant harvest to feeding dairy cows, reducing the amount of cereals available on the market. Their demands focused on reversing the fodder price increases and raising the milk price, which they deemed too low. With fodder costs accounting for 70–80 percent of production expenses, breeders struggled to survive: while the [cost of producing a liter of milk was 1.80 dinars \(\\$0.63\)](#), [the selling price was set at only 1.35 dinars \(\\$0.42\)](#). In response to these protests, the Ministry of Commerce [announced the cancellation](#) of the fodder price increase. However, [according to livestock farmers](#), to compensate for their losses following the cancellation of the price increase, fodder production companies manipulated quality standards. This negatively affected the health of cattle herds and production levels, further undermining the working and living conditions of livestock farmers.

In January 2024, Saied, who had repeatedly accused fodder manufacturers of speculation, announced the [creation of the National Fodder Office](#), granting the state a monopoly on fodder production and importation. However, far from solving the livestock sector's problems, these measures have had little effect. Fodder shortages have persisted, pushing more breeders to sell their livestock and abandon the activity, further exacerbating food insecurity in the country. The decline of the agricultural sector is part of a long-term downward trend that Tunisia has been experiencing for two decades. Between 2012 and 2023, the [share of the workforce](#) employed in agriculture fell from 17 percent to 12 percent.

Droughts are not the only factor behind this crisis, however. Algeria's dam-building projects along the transboundary rivers with Tunisia, coupled with increased water consumption, have drastically reduced downstream water levels, leading to crop failures and aggravating the financial difficulties of farmers in Tunisia's western regions. Since 2017, Algeria has been implementing an ambitious development policy through building dams along shared rivers with Tunisia, extending irrigation networks, and expanding water retention infrastructure such as artificial lacs. Between 2017 and 2019, Algeria swiftly [increased the number of its dams](#), from sixty-five to eighty-one, with a goal of reaching 139 by 2030. It has effectively met its irrigation needs in eastern regions through reducing the amount of water flowing downstream. But, at the same time, Algeria's construction of dams on the Oued Mellegue and other shared rivers [has reduced irrigated land in Tunisia](#). Oued Medjerda, Tunisia's most important transboundary river, has experienced [a significant decline](#) in its flow following the construction of a dam in Algeria. The river supplies water to more than half of the population and serves [as a major lifeline](#), with 13.4 percent of Tunisia's total population living within its basin (see map).

Map: Medjerda River Crosses Algeria-Tunisia Border





Beyond dam construction, Algeria has also **intensified its exploitation** of the shared underground water aquifer with Tunisia and Libya. This aquifer, containing between **40,000 and 50,000 billion cubic meters of water**, is being exploited at 70 percent by Algeria. Politically weakened, the Tunisian regime initially accepted the situation as a *fait accompli* and shifted its focus to managing water scarcity. Its primary strategy involved reducing consumption and implementing **water cuts** whenever reserve levels reached critical thresholds. However, the severity of water scarcity and the intensification of the Algerian-Moroccan rivalry recently created an opportunity to bring the issue of groundwater to the forefront. In April 2024, a Maghreb summit involving Algeria, Libya, and Tunisia (with Morocco notably excluded) led to an agreement to reactivate a ministerial **consultation mechanism for managing shared groundwater** resources. However, the agreement fell short of including any binding commitments; therefore, the water issue is expected to continue to dominate the agenda in the Maghreb and **may even spark conflicts**. Projections indicate that **average temperatures in Tunisia** will rise by 2.1–2.4 degrees Celsius by 2050 and by 4.2–5.2 degrees Celsius by 2100. This temperature increase will **severely impact rainfall**, with expected declines of 1–15 percent by 2050 and 18–27 percent by 2100. Urgent climate adaptation measures are essential to mitigate these impacts and safeguard water resources in the region.

The water crisis has forced thousands of livestock breeders in border regions to sell their land and livestock, fueling smuggling networks into Algeria. Initially concentrated in the Tunisian regions of Kef, Jendouba, Siliana, and Kasserine, this illegal activity has since expanded to Beja and Bizerte. Between 2015 and 2022, Tunisia's **herd shrank from 671,000 to 388,000**. The most severe decline occurred **between 2019 and 2020, with a loss of 184,500**. The sharp drop in dairy cows caused milk shortages and significant income losses for livestock breeders.

Livestock smuggling networks have taken advantage of Tunisia's agricultural decline and the rising demand for livestock in Algeria's border regions. Intermediaries purchase livestock in Tunisia, arrange their transport, and smuggle them illegally into Algeria, benefiting from **corrupt ties with border guards**. This smuggling has acted as a transfer of animal wealth, further deepening Tunisia's food crisis. This asymmetry is also evident in the **increasing number of Tunisian border-region farmers** who have become seasonal laborers in Algeria, working during harvest periods to compensate for income losses caused by drought and water shortages.

Food Insecurity and Growing Dependency on Algeria

Since the breakdown of democracy in 2021, **Tunisia has faced a financial impasse**. After a decade of financial support and easy access to external funding, the country finds itself **increasingly isolated** under Saïed's leadership. His anti-Western stance and recent **rejection of an International Monetary Fund program** has heightened the risk of a financial collapse, as Tunisia faces dwindling external funding without a clear alternative plan. The country has essentially been forced to implement austerity measures, including **cutting imports**—even of **basic foodstuffs**—and stifling investment, particularly in agriculture and climate adaptation. Isolated and struggling to secure its survival, Saïed's populist regime is relying on **financial support from neighboring Algeria**. Additionally, the regime is tolerating the expansion of smuggling activities along the Tunisian-Algerian border, increasing Tunisia's food dependency on its neighbor and **granting Algeria even more political leverage**. The dependence of marginalized border regions on illicit food supply chains—and the destabilizing effects if these networks were to be disrupted by Algerian authorities—could become a tool for Algeria, potentially weaponized to exert pressure on Tunisia.

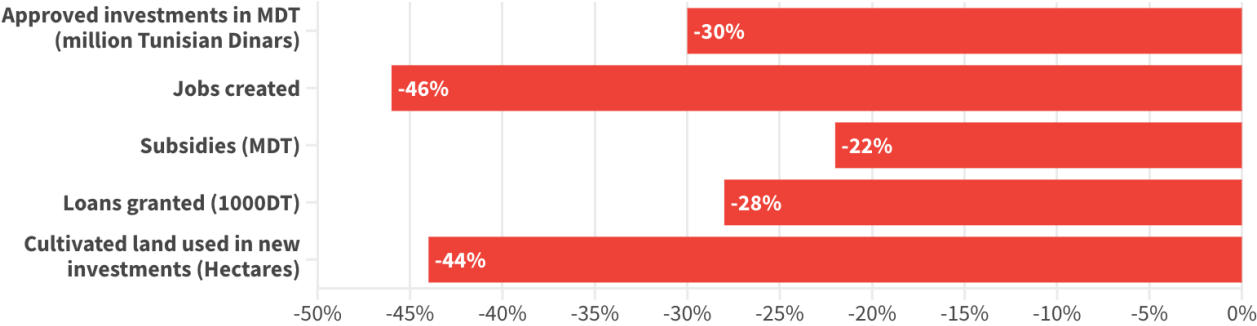
Tunisia’s economic policies have proven to be inefficient and particularly detrimental to the farming sector and food security. The country’s growth rate has stagnated since 2020, and in 2023, Tunisia recorded its **second-lowest economic growth** in a decade—just 0.4 percent. The only time growth was lower was in 2020, the first year of the COVID-19 pandemic. This weak economic performance has been reflected in the agricultural sector, with the **agricultural, forestry, and fishing share of GDP declining** from 10.8 percent in 2022 to 9.5 percent in 2023.

Meanwhile, farmers have faced a sharp increase in input costs (for example, for corn, soy, barley, and fodder)—a situation compounded by import restrictions following the state’s establishment of monopolies over fodder, seeds, and cereals imports. They have also been constrained by fixed prices and limited access to bank credit, leading many to stop investing in agriculture. The numbers reflect this trend: between 2019 and 2024, investment declined by 30 percent, jobs in the sector fell by 46 percent, and credit allocated to farmers dropped by 28 percent. Additionally, the cultivated land that would have been used for new investments shrank by 44 percent (see Figure 1).

The resulting exacerbated agricultural crisis has had three major consequences. The first is soaring food inflation. The **rise in food prices** has doubled since 2021, increasing from an average of 5.3 percent between 2015 and 2019 to an average of 10.5 percent between 2021 and 2024. This surge has been fueled by repeated shortages of basic food products such as coffee, rice, cooking oil, and sugar. While Saied’s populist rhetoric of “**counting on ourselves**” aims to maintain price stability, **import restrictions** and the reestablishment of state monopolies over fodder and other agricultural inputs have had the opposite effect, pushing inflation even higher. Food inflation has intensified, with **household spending on food rising** from 29 percent in 2015 to 30 percent in 2021 and 35 percent in 2024.

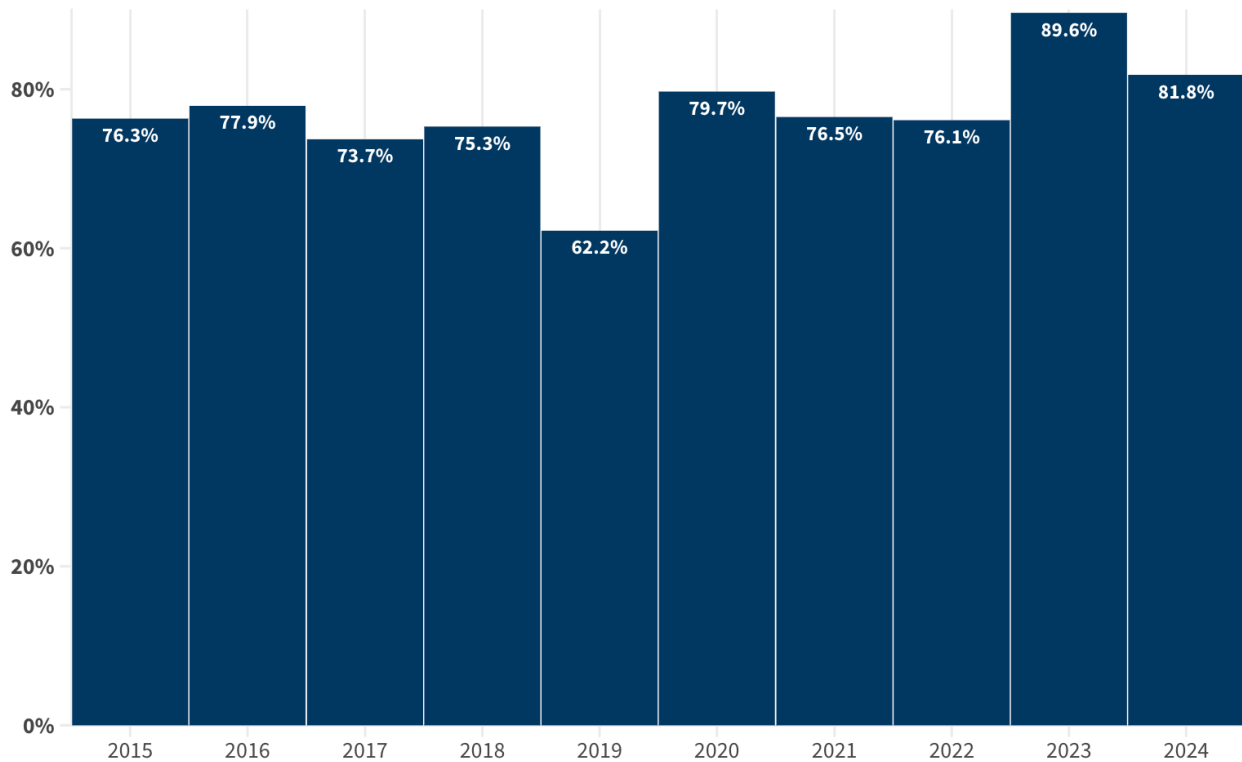
The second major consequence is an increased **dependence on food imports**, particularly wheat, due to the decline in domestic production. In 2024, wheat imports covered 81.8 percent of Tunisia’s needs. In 2023, this figure was even higher at 89.6 percent (see Figure 2). The slight decrease in 2024 is not due to improved domestic production but rather to **severe shortages caused by import reductions**, leading to long queues in front of bakeries and erratic bread distribution

Figure 1. Changes in Key Agricultural Investment Indicators Between 2019 and 2024



Source: TEMA’s calculations based on data from the Tunisian Agency for the Promotion of Investment in Agriculture (APIA).

Figure 2. Tunisia's Dependence Rate on Cereal Imports



Source: TEMA's calculations based on data from the Cereals Agency of Tunisia.

at times. These high import dependency rates highlight the deterioration of local production compared to the period between 2015 and 2019, when wheat imports covered only about 70 percent of Tunisia's needs.

Lastly, the third consequence is a surge in illegal food imports from Algeria. The collapse of domestic food production has led to a dramatic increase in food smuggling across the Tunisian-Algerian border, further undermining the country's food security.

Smuggling of food products from Algeria has swelled since 2021. [Thousands of Tunisians from the border regions](#) of Gafsa, Jendouba, Kasserine, and Kef make multiple trips each week to buy cooking oil, powdered milk, coffee, flour, sugar, cheese, and other basic food

products. The demand has since expanded to other regions in the country's interior and even reached the capital city, Tunis. These Tunisians cross the border into Algeria either in their personal vehicles or through organized trips. Travel agencies have specialized in organizing these commercial trips, which typically last around three days, with [thousands of Tunisians heading to Algeria](#) each week to buy food and consumer goods. These buses transport shoppers, primarily women but also men, to shop in Algerian border regions, particularly Annaba, Constantine, Sétif, and Souk Ahras.

Tunisian consumers benefit from the significant price differences between the two countries, as basic food products are subsidized by the Algerian government. For example, a 5-liter container of cooking oil costs

the equivalent of 8 dinars (\$2.50) in Algeria, compared to 15 dinars (\$4.70) in Tunisia. Tunisian demand has grown so much that small shops and mini-markets have opened in Algerian border towns to cater to this additional Tunisian clientele. In the weekly markets of Tunisian border towns, [Algerian goods are widely displayed and sold](#), a sign of the accelerating cross-border integration between eastern Algeria and western Tunisia.

Algerian authorities have adopted a differentiated approach to regulating smuggling. They tolerate illegal imports of equipment, electronic appliances, and other nonsubsidized goods in exchange for bribes. However, they are stricter when it comes to [subsidized basic food products](#), allowing only small quantities per person. This restriction pushes Tunisian consumers and merchants to make multiple trips, fostering constant circular mobility but also increasing dependence on Algeria.

This regulatory approach gives Algerian authorities leverage over Tunisia, as the Tunisian regime, [through official press channels](#), frequently appeals to Algeria's solidarity to tolerate illicit trade during times of crisis. Tolerance of this smuggling depends on good relations between the two countries. When diplomatic tensions arise—such as after the exfiltration of the [Algerian opposition figure Amira Bouraoui](#) to France via Tunisia in January 2023—Algerian authorities appear to ramp up [food confiscations, arrest merchants, and impose heavy sentences](#). Tunisians' [smuggling](#) thus becomes a tool for Algerian authorities to exert pressure on their Tunisian counterparts. By exploiting Tunisia's growing food insecurity and the dependence of local populations on illegally imported food products, Algeria strengthens its ability to influence the Tunisian regime and push it to align with its priorities and positions. This dependency is especially high in the poor regions of western Tunisia, where the [poverty rate reached 37 percent](#) in 2021 in the central west (double the national rate). In these regions, Saied's regime prioritizes [maintaining stability and preventing protests or social unrest](#).

The increasing reliance on illicit food imports from Algeria is yet another consequence of Tunisia's economic and climate vulnerabilities. It also highlights the country's growing dependence on Algeria, not only for energy but also for food supply. Given its isolation, Tunisia is now relying almost exclusively on Algeria's support, primarily in the form of loans, deposits, and gas supplies at preferential prices. From 2020 to 2022, Algerian loans and deposits at [Tunisia's central bank amounted to \\$650 million](#). Tunisia has also benefited from [preferential gas prices and payment facilities](#).

However, this support has come at a heavy price both domestically and regionally. Domestically, this dependency reinforces the autocratic restoration that began with Saied's power grab in 2021. Algeria's support has enabled Saied's regime to dismantle democracy. Algiers has never tolerated a democracy in its neighborhood, viewing it as a threat to its own regime—especially in the wake of the [Hirak protest movement](#) in Algeria, which called for political freedom and democratization. Ensuring the end of Tunisia's democratic experiment and making any return to democracy irreversible has become a priority for Algiers. On the regional level, this dependency has driven Tunisia to align with Algeria in its conflict with Morocco. Historically, Tunisia has maintained a neutral stance between the rival countries, but this position is no longer tenable due to its financial, energy, and food dependence on Algeria. The turning point came in September 2022, when [Saied officially welcomed leaders of the Polisario Front in Tunis](#), signaling Tunisia's tilt toward Algeria's position in the Western Sahara conflict. Polisario, which Algeria supports, seeks the independence of Western Sahara from Morocco, and the episode triggered a diplomatic crisis between Tunis and Rabat, with both countries [recalling their ambassadors](#). Tunisia's historically neutral stance and balanced relations with both Algeria and Morocco had enabled it to appease tensions between the two rivals. In the late 1980s, Tunisia played a role in fostering rapprochement between Algeria and Morocco, culminating in the [creation of the Arab Maghreb Union in 1989](#). Since then, all the union's secretary-generals

have been Tunisian diplomats. However, the growing tensions—particularly after [Morocco signed the Abraham Accords in 2020](#)—and Tunisia’s alignment with Algeria since Saied’s power grab in 2021 have eliminated a potential mediating role in the Maghreb. This vacuum is further exacerbated by Libya’s internal divisions and [Mauritania’s deliberate efforts to maintain distance from both Algeria and Morocco](#).

Breaking Tunisia's Vicious Cycle

Tunisia is essentially trapped in a vicious cycle. Its deteriorating relationship with international financial institutions, lack of financial support from Gulf or European countries, and inability to access international financial markets are exacerbating its financial crisis. These issues are compounding the impact of climate shocks and worsening food insecurity. The isolationist policies of the populist regime have driven livestock breeding and agriculture further into decline. And Tunisia’s food dependence on Algeria has further strengthened Algeria’s leverage over its vulnerable neighbor.

To break this cycle, Tunisia must prioritize addressing climate change by implementing a comprehensive adaptation strategy to tackle food security challenges. This will require significant funding, making it essential for the country to abandon its isolationist stance and actively seek external financial support. Strengthening climate resilience should include measures to prepare infrastructure, farmers, institutions, and society for

droughts and other climate-related events. Additionally, it should include social protection measures for rural populations, such as climate-dependent cash transfer programs that could help poor families cover rising food costs and cope with crop failures. Tunisia should also seek a formal agreement with Algeria to establish a framework for managing shared water resources, particularly focused on regulating the flow of transboundary rivers and groundwater sources. Finally, Tunisia must move beyond informal cross-border trade with Algeria by pursuing formal trade agreements. Establishing free trade zones or a broader free trade agreement would give Tunisian businesses better access to Algerian markets, foster deeper economic integration, and help reduce the current imbalance in bilateral relations.

About the Author

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