



# Agriculture & Food Security in IRAQ

## IMPACT OF REGIONAL DEVELOPMENTS

Information Note | April 2026

### KEY MESSAGES



- The ongoing regional developments have disrupted shipping through the Strait of Hormuz, increasing volatility and costs across energy, fertilizer and agrifood markets.
- Iraq's exposure is transmitted mainly through higher import/logistics costs and tighter availability
- A key systemic risk is fiscal as oil revenues finance most public spending and agricultural support; any sustained decline in oil prices/exports would weaken the Public Distribution System and input/output subsidies.
- Priority actions include monitoring markets and supply chains, protecting the 2026/27 input window, and targeting support to vulnerable farmers and households.

## EXECUTIVE SUMMARY

The ongoing regional developments in the Middle East has disrupted trade and insurance conditions around the Strait of Hormuz, a critical corridor for oil, gas and fertilizers. The current shock reflects a broader regional and global disruption centered on this corridor, which plays a central role in energy and fertilizer trade. Unlike previous crises driven by food supply disruptions, the 2026 escalation represents an upstream input shock—affecting energy, fertilizers, and logistics—which transmits gradually into agrifood systems through rising production costs, reduced input use, and delayed impacts on yields and prices. The resulting rise in energy and freight costs is transmitting into agrifood markets through higher fertilizer prices and costlier food imports. For Iraq, impacts are expected to materialize primarily through prices, trade and logistics because the country depends on imported food and agricultural inputs and because public food and agriculture programmes rely on oil revenues.

Disruptions in the Strait of Hormuz—through which approximately 25 percent of global oil trade and a significant share of fertilizer flows pass—are also affecting global agricultural input markets. Estimates suggest that 20–30 percent of global fertilizer exports transit through this corridor, with approximately 1.3 million tons per month affected by recent disruptions. These dynamics introduce a lagged risk to agricultural production (6–9 months), particularly in import-dependent systems such as Iraq.

Pre-crisis conditions already point to underlying vulnerabilities that shape current risks. According to the March GIEWS country brief, the 2025 wheat harvest is estimated at 4.4 million tonnes (about 4 percent below average) and wheat import requirements for 2025/26 are forecast at about 2.4 million tonnes (nearly 8 percent above the five-year average).

Following a marked decline at the beginning of the season, recent improvements in rainfall and surface water availability have significantly enhanced overall water conditions. This recovery is expected to have a positive impact on both rainfed and irrigated agriculture. The improved water status has also raised raw water storage levels to exceed those recorded during the same period last year. As a result, these developments provide a short-term stabilizing effect on agricultural production, partially offsetting rising input costs and trade disruptions, while increasing system flexibility during the 2025/26 season.

Above-average rainfall is boosting Iraq's 2025/26 wheat outlook, with planned cultivation across ~4.4 million dunums using groundwater projected to yield ~3.81 million tons, and an additional ~3 million dunums of rain-fed land potentially pushing total production to between 4.6 and 5.9 million tons.

Retail staple food prices remained broadly stable year-on-year as of February–March 2026, underpinned by adequate domestic availability and government subsidy mechanisms; however, emerging upstream cost pressures—particularly from rising energy, transport, insurance and fertilizer costs—are increasingly evident and risk transmitting into selected, import-dependent commodities (see Section 2.5 for prices and market dynamics).

If disruption persists into mid-2026, near-term food availability should remain supported by public and private stocks and the Public Distribution System (PDS). However, risks are likely to intensify during the 2026/27 input-procurement period (August–November) when reduced affordability/availability of fertilizers, fuel and transport services could negatively affect application rates, yields and planting incentives. At the same time, a broader systemic risk relates to fiscal pressures, as oil revenues fund roughly 90 percent of the government budget, and any sustained oil shock would constrain PDS operations and agricultural support programmes.

In this context, the current shock should be understood as a system-wide cost and liquidity shock, where rising energy, transport and fertilizer costs interact with fiscal constraints, amplifying risks across food availability, access and price stability.

A large share of Iraq's population depends on civil servant salaries, which are also paid from oil revenues. A prolonged Hormuz closure could translate into increased fiscal pressures, affecting the government's capacity to sustain public expenditure, undermining household purchasing power even for food that remains physically available.

Therefore, it follows that Iraq's physical exposure to a Hormuz closure is comparable to that of several Gulf economies, while its resilience architecture is more constrained — making targeted international financial support for PDS financing a near-term priority.

This information note provides an overview of emerging risks to Iraq's agrifood system following the 2026 regional escalation, with a focus on transmission channels, market signals, and potential implications for food security.

## **1. CONTEXT AND SUPPLY-CHAIN TRANSMISSION CHANNELS**

Iraq's agrifood system combines a strategic domestic production base with structural dependence on imported staples and agricultural inputs. The PDS plays a central role in stabilizing household access to food, but it also ties food security outcomes closely to supply-chain performance—particularly ports, land corridors, warehousing, and trucking—and to the cost of international shipping. While regional trade linkages, including imports from neighbouring countries such as Iran and Türkiye are frequently referenced in policy and market discussions, comprehensive and timely data quantifying these flows are not systematically available at this stage, representing an important analytical gap. The ongoing regional developments has increased war-risk insurance, freight rates, and uncertainty around the Strait of Hormuz, with spillover effects on energy and fertilizer markets that can disrupt both import channels and domestic distribution chains

The impacts of the crisis are transmitted through a set of interconnected pathways that reinforce one another. Disruptions to regional trade flows increase logistics and transport costs, which in turn raise the prices of imported food and agricultural inputs. Higher input costs translate into increased production expenses for farmers, while also contributing to broader market price pressures. At the same time, rising import bills and potential declines in oil revenues place additional strain on public finances, reducing the government's capacity to sustain subsidies and stabilize markets. These combined effects ultimately lead to higher food prices and reduced household purchasing power, with direct implications for food access, particularly among vulnerable populations.

The crisis can therefore be understood as a compounded cost and input shock rather than a purely trade-related disruption. Beyond energy markets, emerging disruptions in fertilizer supply chains—particularly those linked to the Gulf region—are driving up input costs and increasing the risk of localized shortages. Given the strong dependence of fertilizer production on natural gas, volatility in energy markets is directly transmitted into agricultural production costs. While the immediate impact is felt through higher prices, the effects are likely to materialize with a lag through reduced input use and, consequently, lower yields and output in subsequent agricultural seasons.

### **1.1 Global crisis overview (political-economic-security)**

The ongoing regional developments represents a compound shock in which geopolitical escalation, macroeconomic pressures and maritime security risks reinforce each other. Politically, heightened regional confrontation has increased the risk of escalation and policy responses (sanctions, export controls, emergency procurement) that can fragment markets. Economically, this occurs in a context of high sensitivity to energy prices and financing conditions, so cost increases in fuel and shipping are rapidly transmitted into fertilizers, food trade and inflation expectations.

This pattern is consistent with FAO's global assessment, which characterizes the current crisis as an upstream input shock affecting energy and fertilizer markets, with delayed transmission to agrifood systems and food prices.

At the global level, the crisis is characterized by a cascading transmission mechanism. Initial disruptions to energy markets increase fuel and transport costs, followed by a fertilizer shock due to the dependence of nitrogen production on natural gas. This leads to reduced fertilizer use, lower yields, and tightening global food supply over time. This sequence implies that the most severe impacts on food systems are likely to materialize with a lag rather than immediately.

From a security perspective, threats to commercial shipping and critical infrastructure raise war-risk premiums and can trigger rerouting, port congestion and delivery delays. Because the Strait of Hormuz is

a key corridor for oil, gas and some fertilizer flows, disruption creates a global logistics and input shock that propagates through supply chains: higher freight and insurance increase landed food costs; higher energy prices raise processing and transport costs; and higher fertilizer prices and uncertainty can depress application rates and future harvests.

- **Political:** escalation dynamics and policy measures can restrict trade, raise compliance costs and increase uncertainty for import planning and humanitarian procurement.
- **Economic:** energy and freight shocks transmit to food and fertilizers via higher production/transport costs, tightening fiscal space for subsidies and safety nets.
- **Security:** risks to maritime corridors increase insurance and rerouting, creating delays and intermittent shortages along global and domestic supply chains.
- **International supply chains (food):** higher landed costs (freight/insurance), longer lead times and occasional rerouting/substitution of suppliers.
- **Domestic logistics:** higher fuel prices and trucking costs affect movement from ports/wholesale markets to governorates and raise storage/handling costs.
- **Inputs supply chains:** fertilizer and fuel availability/prices affect planting decisions and yields, especially ahead of the 2026/27 season.
- **Fiscal channel:** oil revenue volatility constrains the budget that finances PDS procurement, transfers and agricultural support.

The transmission mechanism of the current shock follows a cascading pattern from energy markets to agricultural production and food prices, as illustrated below.

**Figure 1:** Transmission pathway from energy shocks to food inflation (Source: FAO)

How Energy Shocks Cascade into Global Food Inflation				
TIMELINE	STAGE	KEY TRIGGER	PRIMARY IMPACT	DOWNSTREAM EFFECT
0 days	Conflict & Blockade	Geopolitical instability, shipping disruption	Reduced oil and gas transit	Global energy price shock
0-30 days	Input Cost Surge	Higher crude and natural gas prices	Rising fuel and logistics costs	Increased farm operating expenses
30 days – ...	Fertilizer Shock	Gas-intensive nitrogen production	50%+ fertilizer price increase	Lower application rates
60-360 days	Yield Contraction	Reduced fertilizer use	Declining crop yields Shift in cropping pattern	Tighter global grain supply
180-360 days	Food Inflation	Supply scarcity and substitution	Cross-commodity price increases	Consumer food insecurity

Read more on food price inflation in SOFI 2025



Source: Global Agrifood Implications of the 2026 Conflict in the Middle East - Impacts on energy and fertilizer trade, and food security . FAO

## 2. FOOD SECURITY OUTLOOK BY PILLAR (2025/26–2026/27)

### 2.1 Availability

Availability is expected to remain supported in the near term by domestic production and existing public/private stocks, including continued PDS operations and imports from Türkiye. This expectation is based on the PDS's long-standing role as a fiscal and political priority, the government's continued access to oil revenues, and the presence of contracted import pipelines and public stocks that provide short-term buffers against external shocks. Nevertheless, the PDS remains indirectly exposed to the same risks affecting broader food availability, as sustained disruptions to trade flows or prolonged pressure on fiscal space could, over time, increase procurement costs and strain the system's ability to replenish stocks at prevailing subsidy levels.

Domestic cereal production continues to play a stabilizing role in national availability. Iraq achieved wheat self-sufficiency for three consecutive seasons (2023–2025), with production estimated between 5.5 and 6.4 million tons. More recent estimates for 2025, however, suggest production of approximately 4.4 million tons, implying an import requirement of around 2.4 million tons to meet domestic needs.

Beyond its contribution to yields, improved water availability has helped reduce production costs and exposure to risk. Higher soil moisture levels reduce reliance on pumped irrigation, thereby lowering fuel requirements at a time of elevated energy prices. This dynamic is particularly relevant under current conditions, where fertilizer affordability and availability remain uncertain and farmers' capacity to offset input constraints through increased irrigation is limited.

For the 2025/26 season, planned wheat cultivation covers approximately 3.4 million dunums under groundwater systems and around 1 million dunums of irrigated land. Based on expected yields of about 900 kg per dunum under groundwater systems and 750 kg per dunum in irrigated areas, the planned area would imply production of approximately 3.8 million tons. In addition, improved rainfall conditions are expected to support cultivation on an estimated 3 million dunums outside the formal planting plan, although output from these areas has not yet been formally quantified. On an illustrative basis, total wheat production could range from around 4.6 million tons under a lower-yield scenario to nearly 5.9 million tons under more favorable conditions.

Despite the improved production outlook, uncertainty remains regarding the volumes effectively procured into public stocks. Ongoing consultations, including with the Kurdistan Region of Iraq, suggest potential constraints related to the allocated procurement quota (approximately 292,000 tons), producer dissatisfaction with the indicative procurement price (around IQD 700,000 per ton), and delays in payment, with only about 50 percent of the previous season's procurement reportedly settled. Together, these factors may affect marketed volumes and introduce uncertainty into the replenishment of public stocks.

Iraq entered the current crisis with a high degree of structural exposure to external supply disruptions, with available pre-crisis estimates indicating that nearly 47 percent of its caloric supply depends on imports transiting through the Strait of Hormuz (not including significant food trade with Iran). This exposure extends beyond cereals to include vegetable oils, dairy products, and animal-based commodities, underscoring the systemic nature of trade-related risks. Should the disruption persists into the 2026/27 season, higher fertilizer (with no support from the government due to shortage of allocation) and fuel costs and potential constraints in input distribution could reduce application rates and yields. On the import side, higher freight and insurance costs and longer lead times would raise both the cost and uncertainty of replenishing stocks, particularly for shipments routed through southern corridors.

Given the importance of these commodities—particularly dairy products and fresh produce—in urban consumption patterns and dietary diversity, any disruption to imports from Iran may have implications not only for market availability and prices but also for diet quality, especially among vulnerable populations.

By contrast, Iraq's overland trade corridor with Türkiye is not directly exposed to maritime disruptions. According to 2024 mirror trade data reported by the United Nations Comtrade database and the Turkish Statistical Institute (TURKSTAT), Türkiye is one of Iraq's largest sources of food imports, supplying over USD 500 million in wheat flour and other milling products, more than USD 600 million in poultry meat and

eggs, approximately USD 400–450 million in lentils, pulses and other grains, and around USD 480–500 million in vegetables and fruits. These flows are predominantly transported via overland border crossings.

## 2.2 Access

Access risks arise mainly through purchasing power dynamics and the cost of moving food through supply chains. While staple food prices have remained broadly stable over the past year, pressures in fuel, freight/insurance and selected non-staple items are gradually increasing the cost of the food basket. At the same time, purchasing power is shaped by a combination of wage trends, exchange rate movements, and rising energy costs, which together influence household real incomes and the affordability of food. The PDS remains a key buffer for household access, however any oil-revenue shock that constrains public procurement and distribution would weaken this stabilizing effect.

Despite these risks, food access is partially supported by the continued functioning of overland supply chains. Imports through Türkiye and the Kurdistan Region, as well as cross-border trade with Iran where feasible, provide alternative channels that help offset disruptions in maritime routes. In addition, the Jordan corridor (Aqaba–Trebil) may serve as a complementary pathway, albeit at higher cost. Together, these routes contribute to short-term resilience in food access, while remaining sensitive to cost escalation and logistical constraints.

## 2.3 Utilization

Utilization risks are indirect and may emerge if higher prices reduce diet quality or if disruptions to electricity/fuel supplies affect food storage (cold chain), processing and safe preparation. Water availability and sanitation conditions also remain important determinants of nutrition and health outcomes, particularly for vulnerable households. Beyond availability and prices, the current crisis may also have important implications for diet quality and nutritional outcomes. Iraq's reliance on imported dairy products, fruits and other nutrient-rich foods—particularly from regional suppliers such as Iran—suggests that disruptions to trade flows or rising import costs could reduce dietary diversity, especially if households shift consumption toward lower-cost staple foods. These effects are likely to disproportionately affect vulnerable groups, including low-income households, children and displaced populations, for whom access to diversified and nutrient-rich diets is already constrained. Integrating this dimension is essential to capture the full scope of food security risks, extending beyond caloric availability to include nutrition and diet quality.

## 2.4 Stability

Stability is threatened by volatility in shipping conditions (insurance and freight), fuel prices and fertilizer markets, which can cause intermittent delays and price spikes along import and domestic distribution chains. The logistics shock is not limited to temporary disruption but reflects structural constraints, as shipping delays, rerouting, and increased war-risk insurance premiums are likely to persist beyond the immediate crisis period. This implies prolonged pressure on import costs and delivery times even if geopolitical conditions stabilize. The most consequential stability risk is therefore a prolonged disruption that affects (i) timely import replenishment for PDS/markets and (ii) the August–November 2026 input-procurement window for 2026/27 production, potentially increasing future import dependence and exposure to further shocks.

## 2.5 Prices and market dynamics

**Retail food price trends.** Retail food prices in Iraq remained broadly stable over the past year, although emerging cost pressures were observed in selected food and non-food items. This stability is largely attributable to adequate domestic availability of key staples and the continued implementation of government subsidy programmes, which have played a central role in moderating price volatility and supporting household access to basic food.

However, Iraq's inflation dynamics in March 2026 show early signs of instability after a period of unusually low price growth. Following nine consecutive months of negative food inflation, the cost of food rose by 1.5

percent compared to the same month last year. This rebound in food prices contributed to a sharp increase in headline inflation, which climbed to 2.2 percent from 0.8 percent in February, marking its highest level since February 2025. The shift highlights renewed pressures in the economy, particularly in essential goods that directly affect household welfare. While the overall rate remains moderate by regional standards, the sudden uptick underscores the vulnerability of Iraq's inflation path to food price volatility and signals potential challenges for policymakers seeking to balance stability with affordability.

Based on WFP retail price monitoring data, national average prices in March 2026 show that wheat flour prices increased marginally (1 percent year-on-year), while rice prices declined by approximately 4 percent compared to the same period in 2025. These trends reflect stable supply conditions and the buffering effect of public distribution and pricing mechanisms. Analysis of WFP retail price data between March 2025 and March 2026 confirms the limited year-on-year variation in core staples, including bread (+2.6 percent), and sugar (-3.2 percent), suggesting the absence of generalized inflation across the main staple food basket. However, this overall stability masks growing pressures within specific commodity groups, most notably vegetable oil. Prices of vegetable oil increased sharply (+12.3 percent year-on-year), reflecting Iraq's exposure to international markets and higher import-related costs. This trend signals a gradual transmission of external price pressures into the domestic food system, particularly for commodities with limited local production. Prices of protein and dairy products followed a more mixed pattern, pointing to differentiated supply conditions across value chains. Beef prices remained broadly stable, while substantial declines were recorded for chicken (-13.7 percent) and milk powder (-5.1 percent). In contrast, egg prices increased by 8.9 percent.

More pronounced inflationary pressures were observed outside the food basket, particularly in energy-related commodities, which represent a critical indirect cost driver for food systems. Prices of liquefied petroleum gas (LPG) rose sharply, by 48 percent nationally and by more than 211 percent in the Kurdistan Region of Iraq (KRI), highlighting severe stress in energy markets. While kerosene prices remained largely unchanged, the magnitude of LPG price increases has important implications for household expenditures, transportation costs, and food preparation. Over the same period, the parallel market exchange rate depreciated moderately (+4.4 percent), increasing the risk of imported inflation and reinforcing pressure on energy- and import-dependent commodities.

Overall, price developments suggest that price stability in Iraq is increasingly uneven and vulnerable to sector-specific shocks. While subsidized staple foods continue to anchor the broader food basket, rising prices for vegetable oil and essential energy commodities, particularly LPG, are likely to erode household purchasing power, especially among urban and non-subsidized populations. These trends point to a gradual but discernible transmission of cost pressures from energy markets and external sources into the domestic economy, underscoring the need for continued monitoring in the coming months.

**Purchasing power signals.** Despite stable staple prices, some indicators point to pressure on household purchasing power: the unofficial exchange rate depreciated moderately and daily wages for unskilled labour declined over the period, while prices rose more visibly for selected non-food items such as kerosene. This implies that food access could worsen even without immediate, broad-based increases in staple food retail prices.

**Agricultural input price trends.** Input costs are more exposed to the ongoing regional developments through energy and regional trade channels. The Gulf region is a key supplier in global fertilizer markets (about 13 percent of global nitrogen exports and 9 percent of phosphate fertilizer nutrients), while nitrogen fertilizer production is highly dependent on natural gas prices—creating a direct transmission channel from energy-market disruption to fertilizer costs. Global market indicators point to a sharp increase in fertilizer prices following the escalation, with urea prices rising by an estimated 40–60 percent compared to pre-conflict levels, reflecting both supply disruptions and higher energy costs. These global dynamics are increasingly reflected in domestic markets, where farmers relying on commercial supply channels are facing rising fertilizer prices and reduced affordability, particularly in the absence of sufficient public support due to constrained budget allocation. Rising fertilizer and fuel costs increase production costs for farmers and may constrain application rates where access to credit is limited, with implications for yields and prices in subsequent seasons.

- **Freight, insurance and lead times:** war-risk premiums, container availability, rerouting and port congestion affect landed costs and delivery schedules.
- **Energy and domestic logistics:** fuel price increases raise trucking, milling/processing and cold-chain costs, widening wholesale–retail spreads.
- **Fertilizers and farm-gate costs:** higher fertilizer prices can increase production costs and, if they reduce application, lower future supply and raise next-season prices.
- **Exchange rate and liquidity:** any depreciation or tightening of trade finance increases import costs and may amplify volatility.
- **Stocks and procurement timing:** when public/private stocks fall, the market prices against replacement costs; delayed replenishment can cause localized spikes.
- **Policy and subsidies (PDS and agriculture):** the scale and timeliness of PDS distribution, price controls and input support influence how much of the shock reaches consumers.

**Recent signals and outlook.** Following the regional escalation on 28 February 2026, March price data do not indicate an immediate or broad-based pass-through to food prices, as month-on-month changes for most staples remained limited. Global evidence suggests that initial food price impacts may remain limited in the short term when global grain supplies are adequate.

Available evidence suggests the short-term impact on retail staple prices in Iraq has so far been contained, with stronger price pressures observed in fuel and selected higher-value items rather than in principal staples. However, sustained increases in energy, fertilizer and transport costs would be expected to transmit gradually through supply chains into wholesale replacement costs and, with a lag, into retail prices—especially if stocks tighten or fiscal constraints reduce the scope for stabilization (including PDS procurement and distribution). In this context, particular attention may be given to indicative early warning signals, which could signal an accelerated transmission of external pressures into domestic food prices and household purchasing power. Suggested indicators to be considered are:: retail and wholesale prices for key staples, wholesale-to-retail spreads, freight and war-risk insurance rates, fuel prices, fertilizer import prices, port throughput/clearance times, trucking availability/costs, exchange-rate movements and public/private stock levels.

While short-term price stability persists, risks remain strongly forward-looking. Rising energy, transport and fertilizer costs are expected to transmit gradually through supply chains into wholesale replacement costs and, with a lag, into retail prices—particularly if fiscal constraints limit the government’s ability to stabilize markets.

In this context, current policy directions aim to contain price pressures by maintaining relatively low tariffs on essential agricultural imports in the short term. However, the implementation of Council of Ministers Decision No. 270, which introduces unified customs tariffs—including increases of up to 10 percent on selected food items such as fruits and vegetables—may contribute to upward pressure on domestic prices, accelerating the transmission of external cost shocks to consumers.

More broadly, conventional trade protection measures may have counterproductive effects under current conditions. Increasing tariffs or restricting imports could amplify domestic price pressures rather than protect local production, given the strong and rapid pass-through of global cost increases.

Accordingly, temporary measures to reduce or suspend tariffs on essential food items and agricultural inputs—combined with faster customs clearance procedures—may help contain inflationary pressures in the short term while maintaining supply stability.

### 3. CONSOLIDATED IMPACT ASSESSMENT AND SCENARIO

Overall, the ongoing regional developments are affecting Iraq’s agrifood system mainly as a system-wide cost shock. Higher freight and insurance premiums, rising fuel costs and fertilizer price increases raise (i) the cost of importing food and agricultural inputs and (ii) the cost of domestic production, irrigation, transport and processing. Near-term risks are concentrated

in logistics and prices; medium-term risks are concentrated in the 2026/27 agricultural season if input constraints reduce fertilizer use and production incentives.

The shock is not limited to trade disruptions but reflects a compounded interaction between global supply constraints, rising input costs, and domestic fiscal pressures. Higher fertilizer and fuel costs are increasing production expenses and may reduce input use, while declining oil revenues constrain the government's capacity to sustain subsidies, finance food imports, and maintain Public Distribution System (PDS) operations. In the Iraqi context, where food security is closely linked to oil revenues and liquidity conditions, this creates a reinforcing cycle affecting availability, access, and price stability simultaneously.

As a result, the ongoing regional developments should be understood as a systemic crisis requiring the simultaneous management of financing, logistics, and agricultural inputs. The most critical risks do not stem from immediate production losses, but from rising import costs, constrained fiscal space, and reduced access to key inputs—particularly fertilizers and fuel—especially in the lead-up to the 2026/27 agricultural season.

Improved water availability supports short-term stability by buffering production against immediate supply disruptions and input shocks. However, this stabilizing effect is seasonal and non-transferable. The relative water abundance in 2025/26 cannot compensate for potential agro-inputs shortages during 2026/27 season. As such, water availability improves near-term resilience but does not materially reduce forward looking risks. While current production conditions may appear stable in the short term, the impact of these input constraints is expected to materialize with a lag. Higher input prices and reduced availability may lead farmers to adjust application rates or scale back production, resulting in lower yields and reduced output in subsequent agricultural seasons.

The timing of these disruptions further amplifies the risk. Constraints on fertilizer and input availability coinciding with key planting periods may affect farmers' ability to apply inputs at optimal levels, influencing cropping decisions and productivity outcomes. As a result, the agriculture sector faces increasing medium-term risks, even in the absence of immediate production shocks, underscoring the need for close monitoring of input markets and seasonal dynamics.

### **Scenario (prolonged disruption through mid-2026)**

Food availability is likely to remain supported in the short term by existing stocks and continued PDS operations, but replenishment costs increase and fiscal space tightens. The highest-risk period is August–November 2026 (input procurement for 2026/27): limited availability/affordability of fertilizers, fuel and logistics services could reduce application rates and yields, increasing import needs and pressure on household purchasing power.

The timing of input procurement is critical. The most significant risks are expected to materialize not immediately, but during the upcoming input supply window (August–November 2026). Failure to secure fertilizers, fuel and seeds during this period could translate into reduced production in the 2026/27 season, amplifying reliance on imports at a time of elevated global prices.

#### 4. POLICY OPTIONS TO MITIGATE RISKS

In a context of constrained liquidity, policy responses must prioritize critical goods and inputs rather than attempting to protect all sectors simultaneously. A tiered approach is therefore required, focusing first on essential staples (wheat, flour and PDS commodities), followed by key agricultural inputs (fertilizers, fuel, seeds and animal feed), and finally less critical imports. This prioritization reflects the nature of the shock, which is primarily transmitted through energy, logistics and input markets, while fiscal constraints limit the scope for broad-based interventions.

At the same time, policy responses must balance the objective of protecting domestic production with the need to maintain price stability. While trade protection measures may support local producers under normal conditions, they risk amplifying inflationary pressures during a systemic cost shock. In this context, a temporary separation between short-term crisis response measures and longer-term protection policies may be required to avoid exacerbating price pressures while preserving future production incentives.

In the short term, the recent increase in water quantities in Iraq, resulting from relatively above-average rainfall and improved surface flows strengthens the resilience of the agrifood system. Enhanced water availability lowers the cost of production by reducing dependence on irrigation fuel, and expanded rainfed cultivation beyond planned areas. This dynamic partially offsets the current cost and logistics shock, helping maintain domestic supply, stabilize market availability, and delay the transmission of higher import and input costs into consumer prices.

However, the improvement in water availability does not reach levels sufficient to safely support summer cropping, particularly rice cultivation. Pursuing such crops under current conditions could again place pressure on strategic water reserves and might even threaten the security of drinking water supplies. As a result, the positive impacts remain limited to the short term and are highly dependent on cautious water management. While these benefits provide a temporary buffer, they primarily offer a narrow window for policy action to secure inputs, and prepare for the 2026/27 season.

The short-term measures below prioritize limiting cost pass-through, safeguarding the 2026/27 production cycle, and protecting vulnerable households while adopting quick innovations that have shown success by FAO/MOA projects. The medium-term recommendations consider modern agricultural infrastructure, inputs and practices that build greater efficiencies and a domestic sector more resilient to external shocks. These generally require lower capital investment and can build on existing institutional structures, making them more immediately actionable. The long-term recommendations involve larger infrastructure investments, systemic policy reform, and sustained institutional capacity building that realistically require a longer planning and implementation horizon.

##### **Short term** (up to 1 year)

Short-term measures focus on stabilizing markets, securing critical inputs for the 2026/27 cropping season, and protecting vulnerable populations.

1. **Provide timely access to seeds, fertilizers and irrigation fuel** (including through prioritization/subsidy retargeting where needed); plan wheat import/PDS procurement to avoid stock drawdown without replenishment; expand credit/guarantees for input dealers and producers where feasible; reduce import taxes and fast-track logistical requirements for the importation of agricultural inputs.
2. **Suspend or postpone the implementation of recently introduced increases in customs and taxes on relevant agricultural inputs** related to agriculture production, to maintain price stability, and support the 2026/27 production cycle.
3. **Promote climate resilient agricultural management practices** that use external inputs more efficiently.
4. **Reduce post-harvest losses** - introduce improved harvesting, handling, and packaging practices through farmer training and demonstration programs, as these require minimal capital investment and can deliver rapid productivity gains across multiple value chains. Build on successful projects implemented by FAO and GoI.

5. **Train extension services and deploy mobile-based advisory platforms** and market price information systems to quickly reduce information asymmetries for smallholders, leveraging existing telecommunications infrastructure.
6. **Strengthen real-time monitoring of food prices**, imports, freight and insurance costs, fertilizer and fuel availability;
7. **Assess and pre-identify alternative international supply options and trade corridors** (e.g. Türkiye) for priority food commodities and agricultural inputs—including non-Gulf fertilizer exporters and alternative maritime or land routes—recognizing higher landed costs driven by war-risk insurance, rerouting and longer lead times. This assessment should inform trade facilitation, import planning and market-stabilization measures, enabling timely adjustment of sourcing and routing decisions if disruptions through the Strait of Hormuz intensify.
8. **Trade diversification is a key element of short-term resilience.** Increasing reliance on overland trade routes—particularly through Türkiye and the Kurdistan Region—can reduce exposure to maritime disruptions. Given the regional nature of the shock, strengthening coordination with neighboring countries and diversifying supply routes are critical. Regional cooperation on trade facilitation, logistics, and input sourcing can reduce exposure to single corridors and improve resilience under prolonged disruption scenarios. Complementary corridors through Jordan (Aqaba–Trebil) may serve as secondary channels for selected commodities, while cross-border trade with Iran can provide flexibility for perishable goods, where conditions allow. A diversified import basket distributed across multiple corridors is more resilient than reliance on a single route, particularly under conditions of geopolitical uncertainty.
9. **Provide targeted support to farmers facing acute affordability constraints** for fertilizers and fuel through a combination of government-led procurement (notably via the Ministry of Trade for Public Distribution System requirements), private sector import arrangements, and, where feasible, reduce taxes to improve efficiency and reduce costs.

### Medium term (2-5 years)

Medium-term measures focus on improving efficiency, diversification and system resilience.

1. **Reduce post-harvest losses:** Invest in cold chain infrastructure, improved handling practices, and agro-processing capacity to address post-harvest losses estimated at 30–50% for perishable products, with particular focus on the strategic date palm value chain.
2. **Adopt Climate Resilient Practices to increase soil health and use inputs more efficiency:** Scale up soil testing services, promote integrated soil fertility management, and invest in land reclamation programs to address widespread salinity and degradation of arable land across central and southern governorates.
3. **Invest in digitalization and extension services:** Revitalize the public agricultural extension system and introduce mobile-based advisory platforms, remote sensing tools, and farmer field schools to reduce information gaps and raise smallholder productivity at scale.
4. **Increase agricultural mechanization and farm services:** Establish machinery rental schemes, targeted credit lines for equipment acquisition and input suppliers, in coordination with national financial institutions, alongside vocational training programs to address critically low mechanization levels resulting from decades of strife and disinvestment.
5. **Shift policy focus from water volumes, to water productivity (Water Footprint).** Prioritize improving yields per cubic meter through modernization of existing irrigation schemes (sprinkler/drip retrofits, canal lining), rather than expanding irrigated area.
6. **Institutionalize conjunctive surface–groundwater management.** Formalize rules that prioritize surface water use in wet years and regulate groundwater abstraction as a strategic buffer, supported by monitoring and seasonal abstraction ceilings.

### Long term (5-10 years)

Long-term measures focus on structural transformation, sustainability and reduced dependence on external shocks.

1. **Adopt high-yielding and climate-resilient varieties:** Prioritize the adoption of improved, drought- and heat-tolerant high-yielding varieties for wheat, barley, and rice, supported by strengthened seed multiplication systems and partnerships with CGIAR centers such as ICARDA and IRRI. Coordinate initiatives with the new and renovated gene banks in Baghdad and Sulaymaniyah.
2. **Modernize Irrigation Infrastructure and Water Management:** Rehabilitate irrigation infrastructure, promote drip and sprinkler systems for high-value crops, and introduce water productivity metrics as a central policy target, given the critically declining flows of the Tigris and Euphrates rivers. Strengthen water allocation systems and align cropping patterns with available water resources.
3. **Transition from open conveyance to closed, pressurized irrigation systems:** Prioritize large-scale replacement of open canals with closed, controlled pipe, reducing conveyance losses, seepage, evaporation, and illegal abstraction. This transition should focus first on high-value and strategic production zones, while enabling precise water delivery at farm and scheme level.
4. **Strengthen domestic input systems and logistics resilience:** Strengthening domestic input systems and logistics resilience, alongside diversifying energy sources for agriculture (e.g. solar-powered irrigation supported by national programmes), will be critical to reducing dependence on external markets and mitigating exposure to future supply and energy shocks.

## REFERENCES

- CNN. 2026.** *Supply chain disruptions loom amid Iran conflict.* CNN, 23 March 2026.  
<https://edition.cnn.com/2026/03/21/business/strait-of-hormuz-food-supply-intl>
- CZ App (Czarnikow). 2026.** *Middle East conflict triggers disruptions in food supply and container freight.* 2 March 2026.  
<https://www.czapp.com/analyst-insights/middle-east-conflict-triggers-disruptions-in-food-supply-container-freight/>
- Famine Early Warning Systems Network (FEWS NET). 2025.** *Targeted analysis: Food security impacts of drought in Iraq.* October 2025. Washington, DC.  
<https://fews.net/middle-east-and-asia/iraq/targeted-analysis/october-2025/print>
- Famine Early Warning Systems Network (FEWS NET). 2025.** *Weather and agriculture outlook: October 2025.* Washington, DC.  
<https://fews.net/global/weather-and-agriculture-outlook/october-2025>
- FAO. 2025.** *Country Programming Framework for Iraq 2025–2029.* Rome.
- FAO. 2026.** *Assessing the 2026 Middle East conflict: implications on resilience of agrifood systems.* Rome.  
<https://openknowledge.fao.org/server/api/core/bitstreams/25eb58ad-81ec-42e0-bc9c-a95c1c2fd52e/content>
- FAO. 2026.** *GIEWS Country Brief: The Republic of Iraq.* Reference date: 25 March 2026. Rome.  
<https://www.fao.org/giews/countrybrief/country.jsp?code=IRQ>
- FAO. 2026.** *Global agrifood implications of the 2026 conflict in the Middle East.* Rome.  
<https://openknowledge.fao.org/handle/20.500.14283/cd8875en>
- IndexBox. 2026.** *Iraq: Fertilizers market – analysis, forecast, size, trends and insights.* IndexBox Market Intelligence, 23 March 2026.  
<https://www.indexbox.io/store/iraq-fertilizers-market-analysis-forecast-size-trends-and-insights/>
- International Food Policy Research Institute (IFPRI). 2026.** *The Iran war: Potential food security impacts.* Washington, DC.  
<https://www.ifpri.org/blog/the-iran-war-potential-food-security-impacts/>
- Ministry of Agriculture, Baghdad, and Ministry of Agriculture and Water Resources, KRI**
- Observatory of Economic Complexity (OEC). 2025.** *Iraq trade profile and bilateral trade with Türkiye (2024).*  
<https://oec.world/en/profile/country/irq>
- Paraskova, T. 2026.** *Iraq’s economy reels as Hormuz blockade chokes oil revenues.* OilPrice.com, 26 March 2026.  
<https://oilprice.com/Latest-Energy-News/World-News/Iraqs-Economy-Reels-as-Hormuz-Blockade-Chokes-Oil-Revenues.html>
- Republic of Türkiye, Ministry of Foreign Affairs. 2025.** *Türkiye–Iraq economic and trade relations.*  
<https://www.mfa.gov.tr/turkiye-iraq-economic-and-trade-relations.en.mfa>
- Trading Economics. 2026.** *Turkiye exports to Iraq – historical and current data (based on UN Comtrade).*  
<https://tradingeconomics.com/Turkiye/exports/iraq>

**Turkish Statistical Institute (TURKSTAT).** 2025. *Foreign trade statistics: Exports by country – Iraq (2024)*. Ankara, Türkiye.  
<https://www.tuik.gov.tr>

**UN Trade and Development (UNCTAD).** 2026. *From gas to grain: Fertilizer disruptions raise risks for food security and trade*. Geneva.  
<https://unctad.org/news/gas-grain-fertilizer-disruptions-raise-risks-food-security-and-trade>

**United Nations.** 2025. *UN Comtrade Database: International trade statistics – Turkiye exports to Iraq (HS classification, 2024)*. New York, USA.  
<https://comtradeplus.un.org/>

**World Food Programme (WFP).** n.d. *DataViz – Iraq – Prices*. Rome.  
<https://dataviz.vam.wfp.org/the-middle-east-and-northern-africa/iraq/economic/prices>.

**World Food Programme (WFP).** n.d. *Iraq Climate Explorer*. Rome. Available at:  
<https://dataviz.vam.wfp.org/the-middle-east-and-northern-africa/iraq/climate-explorer>