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## BEYOND BORDERS: HOW GULF CONFLICT COULD SPARK A DOMINO EFFECT FROM ENERGY TO FOOD CRISES

- The rivalry between the U.S. and Iran has been simmering for decades, shaped by longstanding political and strategic tensions. On 28 February 2026, that long-standing hostility escalated sharply with a joint military attack by the U.S. and Israel, marking a major turning point in their conflict, which further exacerbated following the killing of Iran's Supreme Leader Ayatollah Ali Khamenei, who has led the country for 37 years since 1989 and played a key role in the 1979 Iranian Revolution.
- In response, Iran carried out retaliatory strikes against U.S. assets and allied bases in several Gulf states hosting American forces including Bahrain, Qatar, UAE and Kuwait, marking a significant escalation in regional tensions. The immediate economic spillovers were evident in widespread airspace closures across parts of the Middle East, disrupting commercial aviation and forcing flight diversions.
- The clashes have raised serious concerns about regional stability and global markets, particularly regarding rising global oil prices, which in turn could drive up transport costs and food production, echoing the sharp spikes in energy and food prices observed after the Russia-Ukraine war starting February 2022. An escalating U.S.-Iran war would not only trigger an energy crisis but potentially cascade into a food crisis through shipping disruptions, input cost surges, protectionist responses, and inflationary pressures, which may also affect emerging economies like Malaysia.

### ***Disruption of shipping routes and higher transport cost***

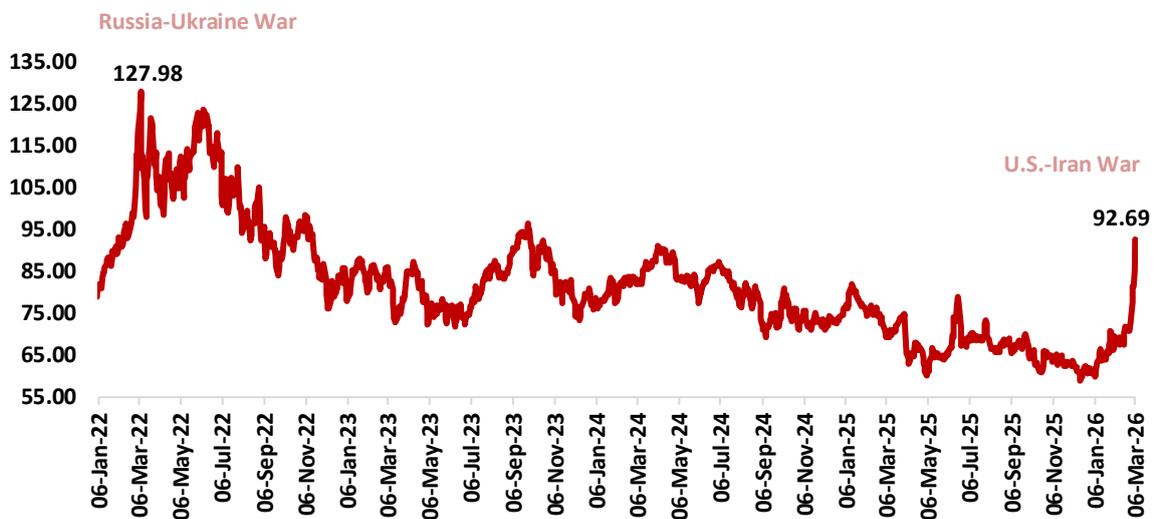
**Image 1: Strait of Hormuz**



Sources: IAS Express

- The ongoing geopolitical escalation between the U.S. and Iran has recently disrupted global oil markets, pushing prices above USD90/barrel, as of writing. Iran's announcement of the closure of the Strait of Hormuz, a critical maritime chokepoint through which roughly 20% of global oil and LNG exports transit, along with its threat to set fire to any vessel attempting to pass through the route, has further raised fears of a major oil supply disruption. Any prolonged disruption along this route could further tighten global supply, potentially driving benchmark crude oil prices above USD 120/barrel per barrel.

**Chart 1: Brent crude oil (USD/barrel)**



Sources: Bloomberg, Bank Islam

- The threat by Iran over the route has disrupted global shipping, leaving tankers stranded and some damaged. Many carriers, including major container lines have suspended transits through the Gulf and Hormuz region, forcing ships to reroute or divert to a longer route around the Cape of Good Hope at the southern tip of South Africa, adding 10-20 extra days of sailing. This longer route increases fuel consumption and operating expenses, which are ultimately being passed on as higher freight charges to shippers. On another note, shipping costs could also be inflated as shipping firms introduce war-risk surcharges in response to high geopolitical risk, following insurer's cancellation of coverage for vessels in the Gulf amid the escalating conflict between Iran and the U.S., which has recently involved other Middle East countries.
- This event is expected to replicate the disruptions experienced during the Russia-Ukraine war that began in February 2022. The world felt the ripple effects on shipping and trade. For instance, grain shipments from the Black Sea were blocked, container lines were rerouted, and insurance premiums for vessels skyrocketed. Ports became congested, freight rates surged, and global supply chains were thrown into chaos, all because a key regional conflict disrupted critical trade routes. A similar scenario is now unfolding in the Gulf.

**Chart 2: Baltic Dry Index (BDI)**



Sources: CEIC, Bank Islam

- The chart above shows that the Baltic Dry Index (BDI), which measures the cost of shipping major raw commodities such as grain, coal, and iron ore, and is widely used as a proxy for global shipping and freight costs, increased sharply following the Russian invasion of Ukraine in February 2022. This conflict disrupted Black Sea ports and trade routes, reducing available shipping capacity and raising operational and fuel costs. A shipping cost surge in May 2022 was largely driven by the prolonged Russia–Ukraine war, ongoing supply chain disruptions, and heightened demand for shipping capacity as global economies continued to recover from the COVID-19 pandemic.

### ***Spikes in energy costs lead to higher food production costs***

- It is worth highlighting that although the conflict is taking place in the Middle East, its impact can still be felt globally because oil is traded in an integrated global market, with Brent crude serving as the key benchmark price. As such, inflationary pressures do not raise solely from direct reliance on Iranian oil exports, but mainly from the global oil pricing mechanism, where supply disruptions and geopolitical risks push up benchmark prices that influence fuel costs worldwide. Even countries that do not buy oil directly from Iran can still face higher fuel prices because global oil contracts are priced against benchmarks like Brent.
- A spike in energy costs could affect food production worldwide through multiple channels across the agricultural and food supply chain. For instance, many fertilizers, particularly nitrogen-based ones like urea and ammonia, rely heavily on natural gas and other energy inputs. Consequently, higher energy prices increase the cost of producing these essential inputs for farmers. The U.S. import price index for fertilizers rose sharply at the onset of the Russia-Ukraine war, reaching 352.3 in April 2022, reflecting both the energy price shock and supply disruptions.

**Chart 3: U.S. - Import Price Index (End Use) - Fertilizers**



Sources: Federal Reserve of St. Louis, Bank Islam

- If the current U.S.–Iran conflict escalates and persists for several months, the implications could extend well beyond energy markets. Prolonged tensions could disrupt natural gas supplies, tighten sanctions on petrochemical trade, and drive up global production costs for fertilizers. Since natural gas is a critical input in the production of nitrogen-based fertilizers, supply constraints or higher gas prices would quickly feed into higher fertilizer prices worldwide. In response to rising costs, farmers may reduce fertilizer usage, a decision that can weaken crop yields and gradually degrade soil fertility over time. Such adjustments would likely introduce greater volatility into global food prices, particularly for countries that rely heavily on imported fertilizers. Emerging and developing economies are especially vulnerable, as limited fiscal capacity often constrains their ability to subsidise rising input costs for farmers.
- These risks could be further amplified by rising energy prices. Higher fuel and transport costs would increase the overall cost of agricultural production and distribution, reinforcing upward pressure on food prices and potentially affecting global food availability. A similar dynamic was observed during the 2022 Russia–Ukraine conflict, when supply chain disruptions triggered a sharp surge in fertilizer prices. This was particularly impactful because Russia is one of the world’s largest exporters of nitrogen fertilizers, and restrictions on its exports significantly raised input costs for farmers globally, contributing to higher food prices.
- Meanwhile, at the farm level, modern agricultural operations rely heavily on diesel-powered machinery such as tractors, harvesters, irrigation pumps, and generators. As a result, increases in fuel prices directly raise the cost of essential farming activities, including land preparation, planting, irrigation, and harvesting. The cost pressures extend beyond the farm gate, affecting transportation and logistics across the food supply chain. Higher fuel prices increase the cost of moving agricultural products from farms to processing facilities, ports, and retail markets, as trucking, shipping, and freight expenses rise. Together, these factors contribute to higher overall

food production and distribution costs, ultimately placing upward pressure on food prices.

- Energy-intensive food processing and manufacturing, which require heating, cooling, milling, packaging, and refrigeration, also see operating costs increase with rising electricity and fuel prices. Perishable items such as meat, dairy, fruits, and vegetables add further sensitivity through cold storage and refrigerated transport, while packaging costs for plastics and synthetic materials, derived from petroleum, are likewise pushed higher. Together, these factors create a compounding effect, where higher energy prices translated into increased food production costs and ultimately higher prices for consumers.

**Chart 4: Wheat futures (USD/Bu)**



Sources: Trading economics

- Similar to how the disruption of Black Sea shipping routes during the Russia–Ukraine War drove a sharp rise in global wheat and commodity prices, the ongoing instability in the Gulf could generate comparable pressures on global markets. Persistent disruptions in this key energy and shipping corridor are likely to push up energy and freight costs, which would eventually feed through to higher commodity prices worldwide. Reflecting these concerns, wheat futures recently climbed above USD600/bu, driven by intensifying logistical disruptions in the Middle East alongside deteriorating U.S. crop conditions during the winter season. Although Iran is primarily an exporter of crude oil rather than agricultural commodities, a spike in oil prices can still have far-reaching effects across the global food system. Higher energy prices raise fertilizer production costs and increase transportation expenses for moving commodities across global supply chains. As a result, the combined impact of elevated energy, fertilizer, and shipping costs could translate into higher food prices globally. Countries that depend heavily on imported fuel and food are particularly vulnerable, as they face the risk of rising import bills and renewed supply chain disruptions reminiscent of those experienced during the Russia–Ukraine conflict.

## Export restrictions amid food scarcity risk

- Export restrictions and local market scarcity often emerge as countries respond to global supply shocks by prioritizing domestic needs, known as protectionism. It happened during the Russia-Ukraine conflict, where India imposed restrictions on wheat exports to ensure sufficient domestic food supply amid surging global prices, while Indonesia limited palm oil shipments to stabilize local cooking oil markets. Other countries also introduced curbs on grain exports, including corn and barley, to prevent domestic shortages and keep prices affordable for their populations. Several other restrictions imposed by various countries are outlined in Table 1.

**Table 1: Countries with Food Export Bans during the Russia-Ukraine War**

Country	Products Banned/Restricted	Context/Date
Argentina	Soybean oil, soybean meal	Export ban amid food price inflation
Algeria	Sugar, pasta, vegetable oil, wheat derivatives	Export ban to protect domestic supply
Egypt	Vegetable oil, maize; later wheat, flour, beans	Banned exports early 2022 as prices surged
India	Wheat	Major exporter restricting wheat exports in 2022
Indonesia	Palm oil, palm kernel oil	Banned to keep domestic prices stable
Iran	Potatoes, eggplant, onion, tomatoes	Export bans on key staples
Kazakhstan	Wheat and wheat flour	Export ban on key grains
Kosovo	Wheat, maize, flour, vegetable oil, salt, sugar	Broad food export restrictions
Turkey	Meat, cooking oils, lentils & pulses	Export restrictions on multiple foods
Ukraine	Wheat, oats, millet, sugar	Ukraine itself limited exports to preserve domestic supply early in war
Russia	Wheat, rye, barley, maize; sugar; sunflower seeds	Export bans on major cereal and oilseed products
Serbia	Wheat, corn, flour, oil	Restrictions on key staples
Tunisia	Fruits & vegetables	Export ban to protect local markets
Kuwait	Chicken products, grains, vegetable oils	Export restrictions announced in 2022

Sources: International Food Policy Research Institute, CNBC

- These measures were often accompanied by additional strategies such as export quotas, temporary bans, or higher export taxes. The combined effect of these protectionist policies created tightened global supply, contributed to sharp increases in international food prices, and highlighted the vulnerability of countries heavily reliant on imports.
- Even though Iran is not a major global exporter of food staples like Russia, a war in the Middle East could influence other countries to impose export restrictions on food. The Strait of Hormuz is crucial not only for energy but also for the global maritime trade of food, agricultural goods, and other staples. Disruptions affect both food-importing and exporting countries through delayed shipping, higher freight costs, and supply chain bottlenecks. Consequently, slowed logistics across the region can increase food scarcity risks, which may be further exacerbated by panic buying that tightens supply.

- Several countries that rely heavily on this pivotal maritime route for global trade, including both the import and export of agricultural goods, would be affected by closures and threats to shipping through the Strait of Hormuz. The conflict can slow container shipping and delay exports from major food-exporting nations. For example, recent disruptions have left approximately 400,000 tons of basmati rice from India stranded at key ports due to blocked shipping routes, vessel suspensions, and emergency surcharges on Middle East transit routes. As a result, food-import dependent countries, particularly in the Gulf region such as Saudi Arabia, Iran and the UAE, could face shortages, with potential spillover effects on global markets. About 30 million tonnes of grain were imported by the Gulf region annually with a large share arriving via Hormuz routes.
- Hence it is undeniable that during periods of geopolitical uncertainty, especially amid war conflict, it is common for nations to adopt protective measures, such as stockpiling or prioritizing domestic supply to safeguard against anticipated disruptions. These measures can further exacerbate scarcity and international price volatility, including holding larger strategic reserves or imposing temporary export limits, similar to what was observed after Russia-Ukraine war when commodity prices spiked. Speculative behavior and panic buying can put upward pressure on demand and prices.

**Table 2: Summary of how the two situations link**

Phase	Russia-Ukraine War	U.S.-Iran War
<b>Conflict trigger</b>	Russia invades Ukraine	Escalation between U.S. and Iran
<b>Energy shock</b>	Russia sanctions disrupt oil & gas markets → prices rise	Strait of Hormuz disruption → supply fears & energy prices rise
<b>Food Impact</b>	Reduced exports + export restrictions → higher food prices	Higher energy costs → higher farming/transport costs → higher food prices
<b>Policy response</b>	Export bans and protections worsen shortages	Similar trade reactions possible if food prices surge and food shortage

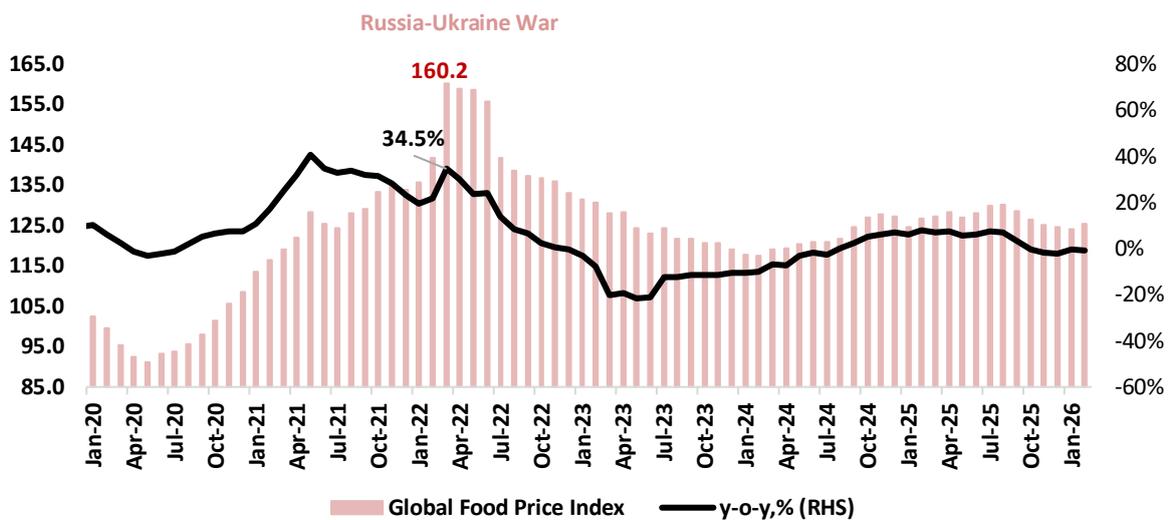
Sources: Bank Islam

- Overall, the link between the U.S.–Iran conflict and potential food protectionism does not stem from Iran being a major global food exporter. Rather, the risk arises from the broader market shocks that such a conflict can trigger across energy, fertilizer, and logistics channels. These cost pressures ultimately feed into higher agricultural production, transportation expenses and create supply chain bottlenecks which can elevate global food prices and prompt countries to adopt protective trade measures such as export restrictions, quotas, or stockpiling to safeguard domestic security. Similar to the effects seen during the Russia–Ukraine war, disruptions to shipping through the Strait of Hormuz could impact both food-importing and exporting countries, potentially intensifying scarcity and driving greater volatility in global food prices.

## Food security and food inflationary impacts on Malaysia

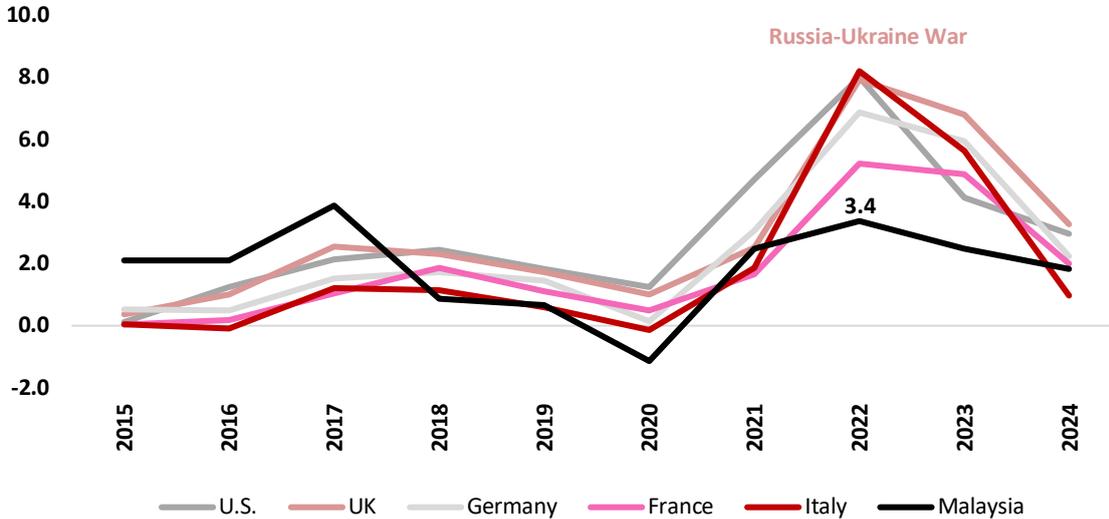
- According to the United Nation, food security is a concept that measures whether a country and its people have physical, social, and economic access to food that meet the preferences, nutritional and dietary needs at any given time. Food and Agriculture Organization (FAO) stated that food security is not just about the amount of food, but it is multifactorial which also considers food availability, access, utilisation and stability.
- In 2022, global commodity prices, including food and fuel, surged because of disruptions to exports from Russia and Ukraine, which together account for a significant share of world wheat, maize, and sunflower oil exports. The Food and Agriculture Organization (FAO) of the United Nations' (UN) global food price index reached record highs, placing inflationary pressure on food costs worldwide.
- The global food price index surged 34.5% y-o-y, reaching a record 160.2 in March 2022, its highest level since the index's inception in 1990. This spike was largely driven by the war in the Black Sea region, which sent shocks through global markets for staple grains and vegetable oils. Because food markets are highly interconnected, rising energy and fertilizer costs pushed up expenses across the entire supply chain, from planting and harvesting to processing and shipping, ultimately translating into higher commodity prices. These elevated food and energy costs have also contributed to higher headline inflation, as the CPI in most countries is heavily weighted toward food and energy items. In many cases, overall price increases exceeded 5.0% in 2022, particularly in the European countries and the U.S.

Chart 5: FAO Global Food Price Index



Sources: FAO, United Nation, Bank Islam

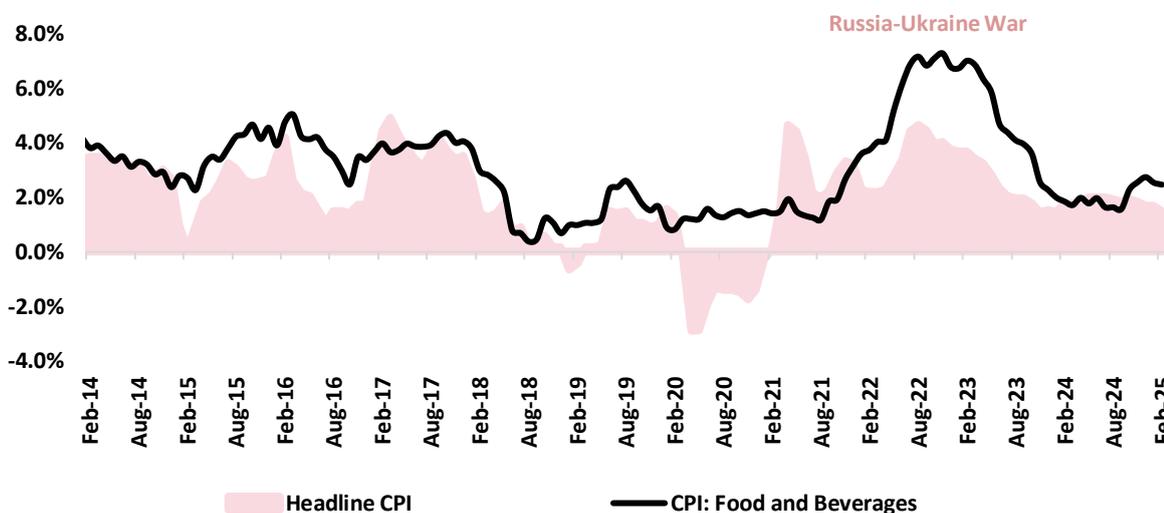
**Chart 6: Headline inflation of Selected Economies**



Sources: CEIC, Bank Islam

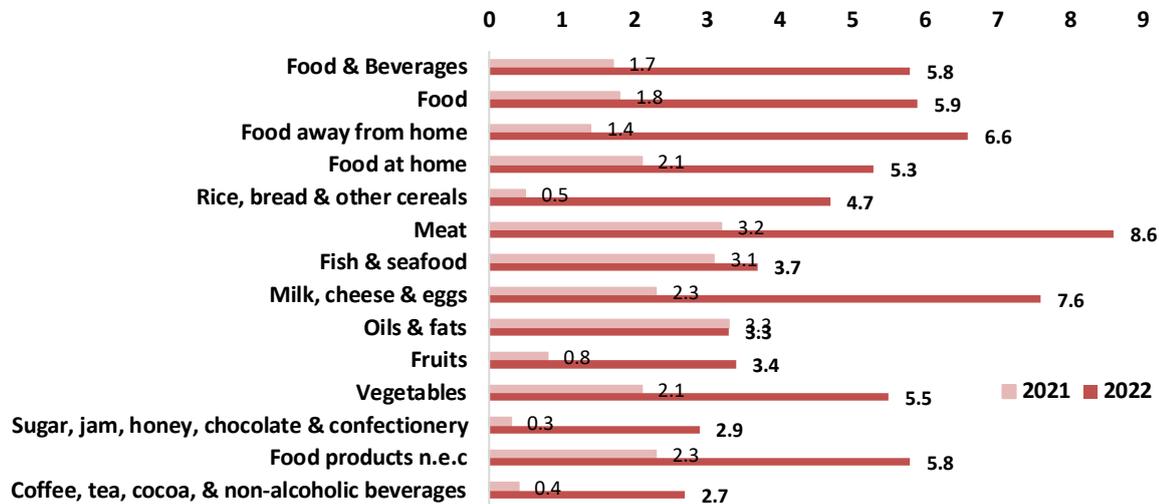
- Likewise, Malaysia experienced notable pressure on food prices despite having limited direct trade exposure to Russia and Ukraine. Food inflation surged to 5.9% y-o-y in 2022, up from 1.8% in 2021, partly reflecting stronger demand following the reopening of the economy after COVID-19 lockdowns. Prices in the food and non-alcoholic beverages (2022:5.8%; 2021: 1.7%) category increased significantly with meat, dairy, eggs, and vegetables recording substantial price rises. The conflict also contributed to rising input costs for Malaysian producers. In particular, the poultry industry, which is highly dependent on imported feed such as corn and soybeans faced higher feed prices, which subsequently pushed up the prices of chicken and egg. These pressures were further compounded by rising global energy and fertilizer costs, which raised production and transport expenses across the food supply chain.

**Chart 7: Malaysia’s Monthly Headline and Food Inflation (y-o-y, %)**



Sources: DOSM, CEIC, Bank Islam

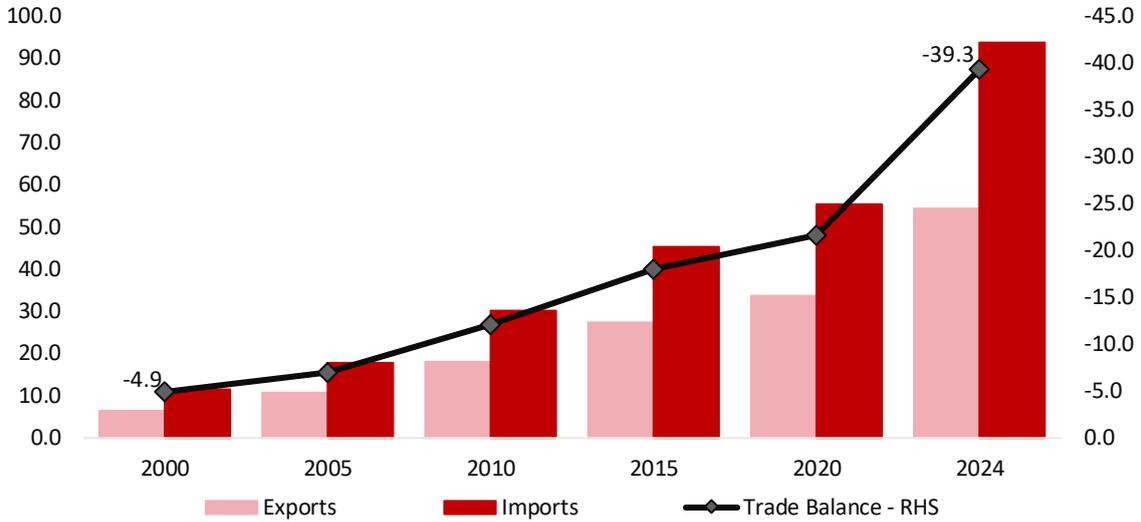
**Chart 8: Inflation for Subgroup of Food & Beverages, 2021 & 2022 (y-o-y, %)**



Sources: DOSM, CEIC, Bank Islam

- Having said that, the impact of price increases in Malaysia remained relatively contained compared with the abovementioned countries, largely due to government intervention through subsidies and price controls. Malaysia's headline inflation registered 3.4% y-o-y in 2022, which was relatively moderate versus many advanced and emerging economies. Much of the inflationary pressure arising from global supply chain disruptions and elevated energy prices was absorbed by the government through subsidy programs and price controls on selected essential goods.
- According to the Auditor's General's Report on the Federal Government's 2022 Financial Statement, the Malaysian government spent RM62.1 billion on subsidies in 2022, almost five times higher than in 2021. Subsidies for food assistance and cooking oil increased markedly, rising 135.5% y-o-y to RM2.47 billion, of which RM976.4 million was allocated to cooking oil subsidies following the sharp rise in crude palm oil prices.
- We foresee a similar pattern emerging if the U.S.-Iran conflict escalated further for longer period, which could pose indirect yet significant risks to Malaysia's food security and food inflation. As a net food-importing country, Malaysia relies heavily on imported food and agricultural inputs. The country has long depended on imports to meet domestic consumption needs. In 2024, Malaysia's food trade deficit reached RM39.3 billion, representing nearly an eightfold increase from RM4.9 billion in 2000. Notably, the deficit has widened significantly since the COVID-19 pandemic, with the figure surpassing RM20 billion from 2020 onwards.

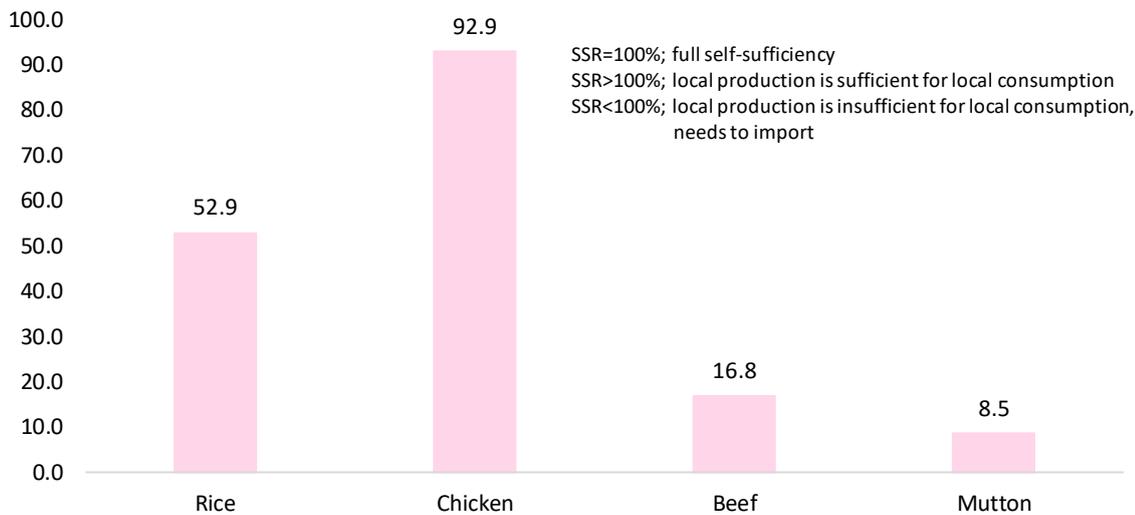
**Chart 9: Malaysia's Food Import & Export Value (RM' billion)**



Sources: DOSM, Bank Islam

- Malaysia's dependence on imported food and agricultural inputs, particularly for beef, mutton, rice, and animal feed, makes the country vulnerable to higher commodity prices and potential shipping delays from the disruptions. In 2024, self-sufficiency ratio (SSR) for beef and mutton remained very low at 16.8% and 8.5%, respectively, indicating that domestic production is far from sufficient to meet local demand and that imports are required to fill the gap. Similarly, rice, a staple food in Malaysia, continues to record a relatively low SSR, reflecting limited domestic supply relative to consumption needs. Meanwhile, although chicken has historically achieved full self-sufficiency, its SSR has fallen below 100% in recent years, suggesting increasing reliance on external inputs and imports.

**Chart 10: Self-sufficiency ratio of selected commodities in 2024**



Sources: DOSM, Bank Islam

- Although Malaysia does not rely directly on Iranian food exports, the disruption of the Straits of Hormuz and the resulting spike in global oil and energy prices would increase transportation, fertilizer, and production costs across the food supply chain. Moreover, the potential for countries along key trade routes to adopt protectionist measures, such as export restrictions or stockpiling, could exacerbate supply constraints, creating shortages and upward pressure on prices. Combined, these factors could lead to heightened food inflation in Malaysia, especially for imported staples, while exposing the economy to broader food security risks, emphasizing the need for strategic monitoring and mitigation measures.
- Nonetheless, policy measures such as subsidies are not sustainable in the long term. Prolonged subsidy spending would place significant pressure on government finances, widen the fiscal deficit, and reduce fiscal space for development expenditure. If a substantial share of government spending continues to be allocated to subsidies to contain inflation, it could weaken Malaysia's fiscal position and potentially affect the country's sovereign credit rating. Therefore, while subsidies may help cushion short-term inflationary pressures, they cannot serve as a sustainable long-term policy solution.

**Table 3: Key channels linking global energy shocks to food security risks**

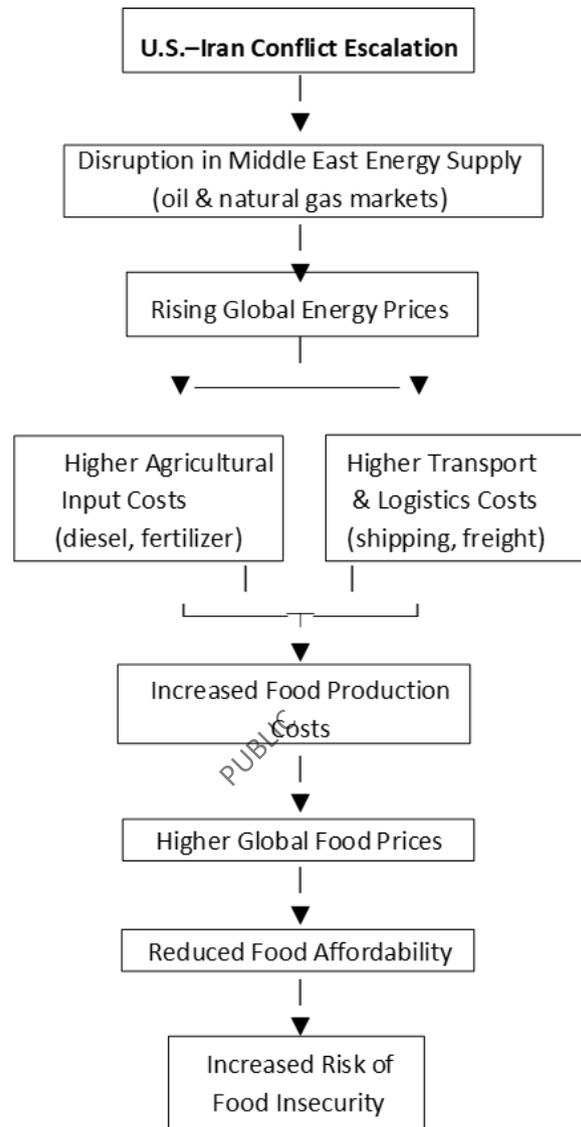
Channel	Effect on Food Security
Shipping disruption and higher freight costs	Increases food prices globally
Energy price spikes	Raises production and transport costs
Fertilizer supply bottlenecks	Reduce crops yields long-term
Export bans	Reduces global food availability
Rising inflation	Reduces affordability and access
Social strain	Increase risk of unrest

Sources: Bank Islam

## Conclusion

- All in all, high energy prices significantly influence the food system by increasing production, processing, and transportation costs. As a result, retail food prices tend to rise, reducing food affordability for consumers. This situation can threaten food security, especially among low-income households that spend a larger portion of their income on food. Therefore, fluctuations in energy prices have broader economic and social impacts that require careful policy consideration. To minimize these risks, governments and stakeholders must adopt strategies that improve energy efficiency in agriculture, reduce dependence on fossil fuels and ensure stable access to affordable food. The following flowchart illustrates the potential pathways through, which an escalating and prolonged U.S.-Iran conflict could affect the global food system and increase risks to global food security.

**Chart 11: Potential pathways linking U.S.-Iran conflict escalation to global food security risks**



Sources: Bank Islam