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Article

# Strait of Hormuz Disruption, Africa–Asia Trade Linkages, and Policy Options for African States

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## Abstract

**Background:** Disruption in and around the Strait of Hormuz can affect African economies even when African cargo does not directly transit the chokepoint. The relevant policy problem is therefore not limited to Gulf geopolitics or crude-oil pricing, but concerns the wider transmission of maritime insecurity into imported inflation, food systems, exchange-rate pressure, and state capacity. **Objective:** This article examines how a Hormuz disruption can transmit to African consumer prices through energy, freight, exchange-rate, fertilizer, and Asia-linked manufactures channels, while clarifying what available trade data can and cannot support. **Methods:** The study combines a structured integrative review with trade triangulation. Bilateral ITC Trade Map tables for Asia and the partner classification “Africa not elsewhere specified” for 2023–2025 are used only as residual micro-evidence because that category is not a defensible proxy for the African continent. Continent-scale inference is instead anchored in UNCTAD regional trade matrices and mechanism-specific evidence from the IEA, EIA, IMF, UNCTAD, World Bank, AfDB, FAO–WTO, IMO, and UKMTO. **Results:** The residual ITC series is exceptionally small, highly volatile, and heavily concentrated in machinery and electrical goods, confirming that Africa-wide vulnerability cannot be inferred from that bilateral category. The broader evidence shows that Africa’s exposure is principally indirect and systemic, operating through higher fuel and shipping costs, war-risk insurance, exchange-rate depreciation, fertilizer affordability, and the cost of Asia-sourced manufactures. Vulnerability is greatest where net fuel import dependence, shallow reserve buffers, non-pegged exchange-rate regimes, fertilizer dependence, and logistics fragility coincide. **Conclusion:** A Hormuz disruption should be understood by African policymakers not as an energy shock alone, but as a compound trade, inflation, and state-capacity shock. More credible responses therefore combine targeted social protection, transparent foreign-exchange prioritization, fertilizer-access strategies, corridor-efficiency reforms, and longer-run structural diversification.

**Keywords:** Strait of Hormuz disruption; Africa–Asia trade linkages; imported inflation in Africa; maritime chokepoints; exchange-rate pass-through; fertilizer-food-energy nexus; supply chain resilience

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## 1. Introduction

### 1.1. Research Problem and Motivation

Operational insecurity in and around the Strait of Hormuz has renewed an old geoeconomic question in a sharper form: how does a localized maritime security crisis become a generalized cost-of-living crisis in distant importing economies? In March 2026, official maritime and energy bulletins described a threat environment serious enough to alter commercial shipping behavior. The International Maritime Organization (IMO) condemned attacks on civilian shipping and warned that freedom of navigation must be protected, while UK Maritime Trade Operations (UKMTO) advisories classified the regional maritime threat as critical and reported conditions highly hazardous for

commercial shipping (IMO, 2026; UKMTO, 2026). The International Energy Agency (IEA, 2026) simultaneously described tanker movements through the Strait as reduced to a trickle and estimated that nearly 20 million barrels per day of crude and product exports were disrupted. The issue for African economies is therefore not confined to Gulf geopolitics or even to the spot oil price. It concerns the wider transmission of a chokepoint shock into transport costs, food systems, import prices, exchange rates, and state budgets.

The structural significance of the Strait is difficult to overstate. The U.S. Energy Information Administration (EIA, 2025a) estimates that oil flows through Hormuz averaged 20 million barrels per day in 2024, equivalent to about one fifth of global petroleum liquids consumption. The same EIA assessment shows that 84% of the crude oil and condensate and 83% of the LNG moving through the Strait went to Asian markets in 2024 (EIA, 2025a, 2025b). The IEA's current monitoring further notes that only Saudi Arabia and the United Arab Emirates possess operational crude pipelines that can materially bypass the Strait, with effective spare bypass capacity of only about 3.5 to 5.5 million barrels per day, while roughly 80% of oil and oil products transiting Hormuz in 2025 were destined for Asia (IEA, n.d.). For African economies, this matters because Asia is not a peripheral trade partner. It is a central source of imported manufactures, machinery, electrical goods, chemicals, and a growing range of intermediates (UNCTAD, 2025; UNCTAD, n.d.). A disruption that raises Asian energy and shipping costs can therefore be transmitted to Africa even when the African cargo itself never physically traverses Hormuz.

### 1.2. Scholarly and Policy Gap

The existing literature and policy commentary remain fragmented in three ways. First, strategic and energy-security analyses often stop at the level of global oil and LNG markets, leaving underdeveloped the question of how external maritime disruption becomes domestic consumer inflation in import-dependent African economies (Shepard & Pratson, 2020; Carrière-Swallow et al., 2022; IMF, 2023). Second, African policy discussions frequently invoke "imported inflation" without unpacking the relative importance of shipping costs, exchange-rate pass-through, fertilizer dependence, and Asia-linked manufactured imports (IMF, 2023; Lemaire & Vertier, 2023; FAO & WTO, 2022). Third, empirical discussions often move too quickly from illustrative trade statistics to continent-wide claims. That is precisely where this paper seeks to be more disciplined. It treats exposure to a Hormuz shock as a problem of structured transmission rather than rhetorical proximity. The relevant causal question is not simply whether Africa trades with the Gulf. It is how energy repricing, freight and insurance premia, foreign-exchange pressure, and production-input costs interact with African macroeconomic and logistical vulnerabilities.

### 1.3. Research Questions and Contribution

The article is organized around three questions. First, what do the ITC Trade Map tables for Asia and the partner classification "Africa not elsewhere specified" actually reveal, and what do they not reveal, about Africa-Asia trade exposure? Second, through which mechanisms can a Strait of Hormuz disruption transmit into African consumer prices and welfare? Third, which types of African economies are most vulnerable, and what follows for policy under contained, prolonged, and severe disruption scenarios? The article makes three contributions. It clarifies the scope of admissible inference from the trade data, it develops an exposure-transmission-buffering framework for interpreting African vulnerability, and it derives a differentiated policy matrix that distinguishes immediate stabilization from medium-run resilience and long-run structural transformation.

## 2. Literature Review and Analytical Framework

### 2.1. Maritime Chokepoints, Systemic Risk, and Asymmetric Exposure

Recent scholarship has moved beyond describing chokepoints as isolated bottlenecks and instead treats them as systemic nodes whose disruption propagates through global trade networks.

Verschuur et al. (2025) show that disruptions at maritime chokepoints generate losses through delays, rerouting, insurance premiums, and direct trade disruption, and that their impacts radiate well beyond the immediate region. Their findings are important for this paper because they shift the unit of analysis from the passageway itself to the network of dependent economies. Countries in Western Africa and beyond can therefore be materially affected even when they are not geographically adjacent to the chokepoint. That systemic perspective is a useful corrective to policy narratives that treat maritime risk as a narrow regional issue.

The Strait of Hormuz occupies a special place within that broader literature because it is both an energy chokepoint and a strategic passage whose alternatives are limited. Shepard and Pratson (2020) show that even so-called soft restrictions around Hormuz, such as heightened insecurity and piracy-related risk, can reduce tanker traffic and alter export behavior. Their analysis reinforces an important analytical point: the passage does not need to be formally closed for economically meaningful disruption to occur. Elevated insecurity can be sufficient to raise insurance premiums, increase vessel risk aversion, reduce traffic, and alter trade costs. This is especially relevant in a contemporary setting where commercial operators respond not only to actual attacks but also to expectations of attack, convoy availability, legal liability, and the pricing behavior of insurers.

### *2.2. Interdependence, Imported Inflation, and Africa's Macroeconomic Exposure*

A useful starting point for interpreting African exposure is the distinction between sensitivity and vulnerability in complex interdependence theory (Keohane & Nye, 2012). Sensitivity refers to how quickly and extensively an economy is affected by an external shock. Vulnerability refers to how costly it is to adjust once the shock occurs. This distinction matters because African economies are not equally exposed. Some are highly sensitive because they are large net fuel importers; others become especially vulnerable because they lack reserves, rely on administrative exchange-rate controls, or have weak fiscal space. In this sense, a Hormuz shock is best understood not as a uniform continental event but as an external disturbance filtered through heterogeneous domestic institutions.

The imported-inflation literature helps specify those filters. For Sub-Saharan Africa, the International Monetary Fund (IMF) finds that a 1 percentage point increase in the rate of depreciation against the U.S. dollar raises inflation by about 0.22 percentage points within the first year on average, with stronger pass-through in non-pegged regimes (IMF, 2023). Kemoe et al. (2024) similarly show that exchange-rate pass-through in Sub-Saharan Africa is sizable, stronger during depreciation than appreciation, and more intense in large or persistent depreciation episodes. These findings are central because they identify the exchange rate as a critical amplifier. A maritime shock does not need to pass one-for-one into administered fuel prices to become inflationary. It can first worsen the import bill, strain reserves, weaken the currency, and then broaden inflation through more expensive imports across the consumption basket.

### *2.3. Shipping Costs and the Fertilizer–Food–Energy Nexus*

A second strand of the literature concerns shipping costs and their downstream inflationary consequences. Carrière-Swallow et al. (2022) show that increases in shipping costs are followed by meaningful rises in import prices, producer prices, headline inflation, and core inflation. Their results matter for African analysis because they caution against reducing external shocks to oil-price movements alone. Freight costs, insurance premiums, delays, and network congestion are independent transmission mechanisms. UNCTAD (2024) reaches a similar conclusion in its maritime analysis, emphasizing that recent chokepoint disruptions have lengthened routes, raised fuel consumption, increased insurance costs, and pushed freight rates sharply upward, with especially severe consequences for vulnerable economies reliant on maritime transport.

A third strand concerns the food–energy–fertilizer nexus. The joint FAO–WTO mapping exercise shows that fertilizer markets are deeply energy-intensive and globally concentrated, so energy and transport shocks quickly feed into fertilizer affordability and supply (Food and Agriculture

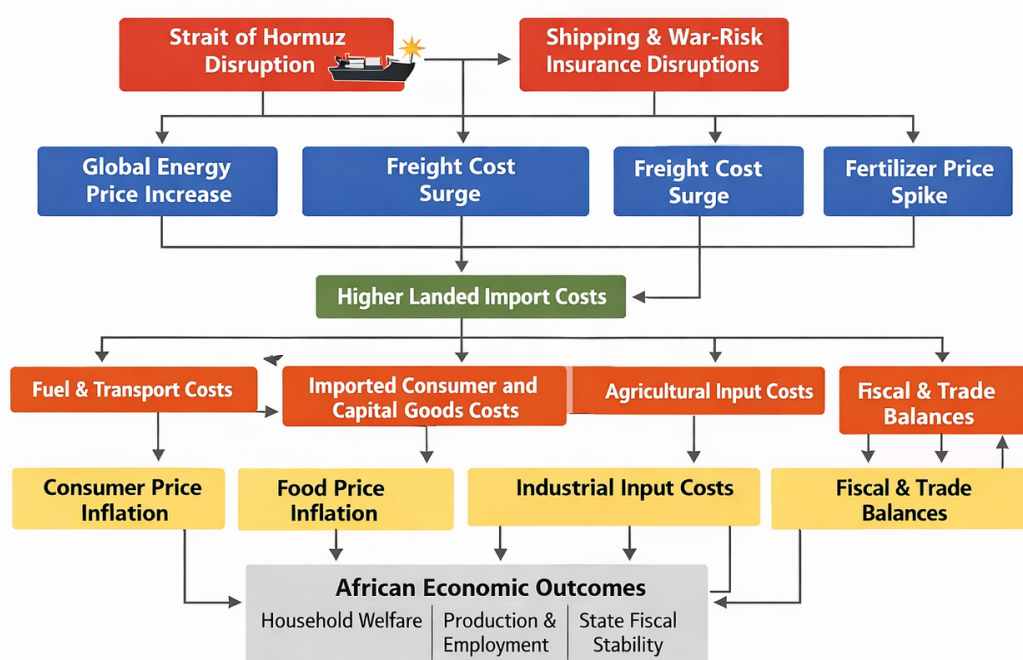
Organization of the United Nations [FAO] & World Trade Organization [WTO], 2022). For Africa, the Banque de France evidence is particularly important because it differentiates timing. Its Eco Notepad estimates a continent-wide pass-through of about 30% from world commodity prices to consumer prices, while its working paper reports a maximum pass-through of 24% and a long-run pass-through of about 20% using monthly data for 48 African countries (Banque de France, 2022; Lemaire & Vertier, 2023). The same evidence indicates that short-run energy pass-through may be muted where subsidies are prevalent, whereas fertilizer effects become more visible at longer horizons. This distinction is analytically decisive. A government can temporarily suppress the retail fuel signal and still face medium-run food inflation when fertilizer use falls or agricultural input costs remain elevated.

#### *2.4. Analytical Framework: Exposure, Transmission, and Buffering*

The article uses an exposure–transmission–buffering framework. Exposure refers to structural dependence on channels likely to be hit by a Hormuz disruption: imported fuel, Asia-sourced manufactures, imported fertilizers, and maritime trade corridors. Transmission refers to the mechanisms through which the shock is converted into domestic prices: oil and LNG repricing, freight and war-risk insurance, exchange-rate depreciation, inventory depletion, and input-cost pass-through. Buffering refers to the domestic capacity to moderate those effects through reserves, credible monetary policy, targeted transfers, logistics capacity, procurement flexibility, and social protection systems. The framework implies that exposure alone does not determine outcomes. A country may be highly exposed but partially buffered, or only moderately exposed but extremely vulnerable because buffering capacity is weak (Titus et al., 2026).

This framework also clarifies why the ITC residual bilateral trade tables cannot bear the full argumentative burden of an Africa-wide paper. Bilateral product tables may illustrate composition within a narrow reporting relationship, but they do not capture exposure at the scale relevant to macro transmission. The central proposition advanced here is therefore modest but stronger: Africa's principal vulnerability to a Hormuz shock is not the tiny residual bilateral trade relation captured in the ITC classification. It is the continent's wider dependence on Asia-linked manufactures, imported energy, freight-sensitive supply chains, and exchange-rate-sensitive import bills. Figure 1 summarizes the article's conceptual transmission architecture, showing how a Strait of Hormuz disruption can propagate into African inflation, welfare, and state-capacity outcomes through energy, freight and insurance, exchange-rate, fertilizer, and Asia-linked manufacturing channels.

Figure 1. Conceptual transmission channels from Strait of Hormuz disruption to African Economic outcomes



**Note.** Author's conceptual synthesis of the exposure–transmission–buffering framework developed in Sections 2.2–2.4 and the mechanism-specific evidence reviewed in Sections 4.3–4.4 and Sections 4.3–4.4.

Figure 1.

### 3. Data and Methodology

#### 3.1. Research Design

The study adopts a structured integrative review combined with trade triangulation (Torraco, 2005). The design is integrative rather than purely systematic because the research question spans multiple bodies of evidence that are methodologically heterogeneous: peer-reviewed scholarship on maritime chokepoints, energy security, and inflation transmission; institutional statistics and technical reports on trade, shipping, energy, and macroeconomic conditions; and operational bulletins that document the real-time status of maritime insecurity in March 2026. The goal is not to pool commensurable effect sizes across identical studies. It is to construct a disciplined causal account of transmission while distinguishing strong evidence from illustrative or context-setting evidence.

The review prioritized sources that met at least one of four criteria. First, they provided direct evidence on chokepoint disruption, shipping costs, exchange-rate pass-through, or commodity-price transmission. Second, they offered continent-scale or region-scale statistics needed for valid inference about Africa rather than a residual partner category. Third, they documented the operational conditions of the Strait of Hormuz during the March 2026 crisis. Fourth, they informed policy design in developing or African contexts where administrative capacity, foreign-exchange constraints, and logistics bottlenecks materially shape outcomes. Foundational theoretical sources were retained even when older, provided they remained conceptually central.

#### 3.2. Trade Data and Treatment of the ITC Residual Classification

The quantitative trade component uses two ITC Trade Map tables exported as HTML-formatted .xls files. They report HS chapter bilateral trade values between “Asia” and the partner classification “Africa not elsewhere specified” for 2023, 2024, and 2025, expressed in U.S. dollar thousands. The original unit is preserved in all calculations. A central methodological point is that “Africa not

elsewhere specified” is a residual statistical category (ITC,2026). It is not a valid stand-in for the African continent. The bilateral tables are therefore used only to inspect the composition, volatility, and concentration of that residual trade relationship. They are not interpreted as measuring Africa–Asia trade at scale. This distinction is not cosmetic. It determines what the data can legitimately support.

### 3.3. *Continental and Mechanism-Specific Triangulation*

Because the residual bilateral tables cannot sustain continent-wide inference, the article triangulates them against broader and more appropriate sources. UNCTAD’s regional trade matrix provides continent-scale Africa–Asia merchandise trade values and growth rates (UNCTAD, 2025). The energy and transit relevance of Hormuz is established using the IEA’s March 2026 Oil Market Report, the IEA’s current background monitoring on the Middle East and global energy markets, and EIA assessments of oil and LNG transit volumes and destination structure (EIA, 2025a, 2025b; International Energy Agency [IEA], 2026, n.d.). Shipping-cost and chokepoint transmission channels are informed by UNCTAD (2024) and Carrière-Swallow et al. (2022). Exchange-rate transmission draws on IMF (2023) and Kemoe et al. (2024). Food-system propagation and commodity pass-through are assessed using FAO and WTO (2022), Banque de France (2022), and Lemaire and Vertier (2023). World Bank (2025) and African Development Bank Group (AfDB, 2025) are used to interpret fuel-pricing regimes, fiscal vulnerability, and macro buffer constraints in African settings.

### 3.4. *Analytical Procedure*

The analysis proceeded in four steps. First, the ITC tables were parsed and normalized to recover HS chapter values, year-on-year changes, and concentration patterns while preserving the original U.S. dollar thousand unit. Second, the residual bilateral evidence was contrasted with UNCTAD’s continent-scale Africa–Asia trade matrix in order to prevent category error. Third, the reviewed literature and official reports were used to identify the main transmission channels linking Hormuz disruption to African consumer prices. Fourth, the evidence was synthesized into a vulnerability typology and a scenario-based policy framework. The scenarios are bounded and directional. They are not point forecasts. This is a deliberate choice, because the available data do not justify a continent-wide econometric estimate of the exact inflation effect of a specific March 2026 shock.

### 3.5. *Limitations and Epistemic Safeguards*

Two safeguards shape the interpretation. The first is scope discipline. The ITC residual tables are used for what they validly contain and no more. The second is causal modesty. Operational and market conditions during active conflict are fluid, and some relevant webpages are dynamic rather than archival. For that reason, the article relies on fixed-date reports where possible, uses dynamic pages only for current structural facts that are clearly stated, and avoids fabricated precision. The aim is to produce a submission-ready argument that is empirically disciplined rather than rhetorically inflated.

## 4. Results

### 4.1. *What the ITC Residual Bilateral Tables Do and Do Not Show*

The ITC Trade Map residual bilateral tables, summarized in Table 1, confirm that the recorded merchandise trade relationship between ‘Asia’ and ‘Africa not elsewhere specified’ is exceptionally small and highly concentrated. In 2025, Asia’s exports to that residual partner category totalled US\$1,943 thousand, while Asia’s imports from it totalled only US\$270 thousand. Relative to Asia’s world trade, these values are negligible at far below 0.001% in both directions. Their small magnitude is not merely descriptive. It is a warning against continent-scale inference. The data do not depict “Africa” in any meaningful aggregate sense. They depict a narrow statistical residual.

The product mix reinforces that conclusion. Asia's exports to the residual African category in 2025 were dominated by HS 84 machinery and mechanical appliances (US\$1,280 thousand, 65.9%) and HS 85 electrical machinery and equipment (US\$243 thousand, 12.5%). Together, those two chapters accounted for 78.4% of the bilateral total. Asia's imports from the residual African category were even more concentrated: HS 85 electrical machinery and equipment alone accounted for US\$241 thousand, or 89.3% of the total, and the top two chapters represented 99.3%. Such concentration is not what a continent-wide Africa–Asia trade structure would look like. It is what a residual and weakly representative reporting category looks like.

The temporal pattern is similarly unstable. Asia's exports to the residual category fell from US\$5,181 thousand in 2023 to US\$1,280 thousand in 2024 and then rebounded to US\$1,943 thousand in 2025. Asia's imports from the residual category collapsed from US\$4,147 thousand in 2023 to US\$72 thousand in 2024 before rising to US\$270 thousand in 2025. That volatility is informative for one purpose only: it underscores the fragility of the category as a basis for continent-wide inference. The defensible use of these tables is therefore illustrative. They show that, within the residual relation, the visible trade is oriented toward machinery, electrical goods, and a handful of other manufactures, not toward the energy and fertilizer products that are most central to a Hormuz-induced inflation shock. Table 1 reports the 2025 HS-chapter composition of this residual trade relationship and makes clear that the observable flows are concentrated in a very small number of manufactured product groups.

**Table 1.** Residual ITC Trade Map relationship between Asia and "Africa not elsewhere specified," 2025 (values in U.S. dollar thousands).

*Panel A. Asia's exports to 'Africa not elsewhere specified'*

HS chapter	Product group	2025 value	Share of 2025 total
84	Machinery and mechanical appliances	1280	65.9%
85	Electrical machinery and equipment	243	12.5%
64	Footwear	101	5.2%
83	Miscellaneous articles of base metal	76	3.9%
82	Tools and cutlery of base metal	48	2.5%
63	Other made-up textile articles	47	2.4%
90	Precision, medical and optical instruments	42	2.2%
94	Furniture and bedding	39	2.0%
87	Vehicles and parts	21	1.1%
99	Commodities n.e.s.	11	0.6%

*Panel B. Asia's imports from "Africa not elsewhere specified"*

HS chapter	Product group	2025 value	Share of 2025 total
85	Electrical machinery and equipment	241	89.3%
84	Machinery and mechanical appliances	27	10.0%
99	Commodities n.e.s.	1	0.4%

*Note.* Author's calculations from the International Trade Centre (2026) Trade Map database using the 2023–2025 bilateral HTML exports. Values are reported in U.S. dollar thousands. The partner category 'Africa not elsewhere specified' is a residual classification and must not be interpreted as continent-wide Africa. The extreme concentration of the import side in HS 85 and HS 84 reinforces the residual character of the series

#### 4.2. Africa–Asia Trade Exposure at Continental Scale

Once the scale problem is corrected, Africa–Asia linkage appears much larger and much more policy-relevant. UNCTAD's regional merchandise trade matrix for 2023 reports that Africa imported 164 from East Asia, 40 from South Asia, and 76 from the Rest of Asia, while exporting 141, 39, and 78 respectively to those same subregions (UNCTAD, 2025). The figure is labelled in U.S. dollars trillions, but the matrix notation suppresses decimals. The entries therefore correspond to approximately US\$0.164 trillion, US\$0.040 trillion, and US\$0.076 trillion, and so forth. On that basis, Africa imported roughly US\$280 billion of merchandise from Asia and exported roughly US\$258 billion to Asia in 2023 (UNCTAD, 2025).

These values imply that Asia accounted for about 44.0% of Africa's merchandise imports and about 39.0% of Africa's merchandise exports in 2023 (UNCTAD, 2025). The same UNCTAD matrix reports average annual growth in Africa's imports from East Asia, South Asia, and the Rest of Asia of 6.4%, 7.9%, and 7.0% over 2018–2023. The macro implication is clear. A meaningful Africa-wide discussion of Hormuz transmission cannot be built on the tiny ITC residual relation alone, because Africa's real trade exposure sits in continent-scale ties with Asian production systems. This matters especially because UNCTAD's data hub indicates that in 2024 Africa imported almost four times more manufactured goods than it exported, reinforcing the continent's sensitivity to imported industrial and consumer goods costs (UNCTAD, n.d.). Table 2 reorganizes the UNCTAD regional matrix into Africa-side import, export, and growth indicators so that the scale of Africa–Asia trade linkage is visible at a genuinely continental level.

**Table 2.** Africa–Asia merchandise trade at continent scale from UNCTAD's regional matrix, 2023.

Africa-side indicator	East Asia	South Asia	Rest of Asia	Total Asia
Imports from Asia (US\$ billion)	164	40	76	280
Exports to Asia (US\$ billion)	141	39	78	258
Average annual import growth, 2018–2023	6.4%	7.9%	7.0%	—

*Note.* Adapted from Figures 2.7 and 2.8 in *Key statistics and trends in international trade 2024: Trade growth amid volatility and ongoing uncertainties* (United Nations Conference on Trade and Development [UNCTAD], 2025). The matrix is reported in U.S. dollar trillions, with decimals suppressed in the cell notation; for example, 164 denotes approximately US\$0.164 trillion. Total Asia therefore corresponds to about US\$280 billion of Africa's merchandise imports and US\$258 billion of its merchandise exports in 2023.

### 4.3. Transmission Channels from Hormuz Disruption to African Consumer Prices

#### 4.3.1. Energy and Refined-Product Channel

The first transmission channel is the most visible. When traffic through Hormuz is disrupted, oil, condensates, refined products, LPG, and LNG become scarcer or more expensive to deliver. EIA (2025a) estimates that 20 million barrels per day moved through the Strait in 2024, while EIA (2025b) estimates that about 20% of global LNG trade also transited Hormuz, mostly from Qatar. The IEA's March 2026 assessment adds the crisis-specific detail: flows through the Strait plunged from around 20 million barrels per day before the war to a trickle, nearly 20 million barrels per day of crude and product exports were disrupted, and product markets such as diesel, jet fuel, and LPG faced acute strain (IEA, 2026). For African economies, this first-round energy shock is felt through more expensive fuel imports, higher transport costs, higher generation costs where diesel is important, and higher import bills for countries already short of foreign exchange.

#### 4.3.2. Freight, War-Risk Insurance, and Shipping-Network Channel

The second transmission channel is maritime rather than purely energetic. Chokepoint insecurity raises war-risk premia, lengthens effective routes, increases fuel burn, reduces schedule reliability, and creates congestion spillovers across the wider shipping network. UNCTAD (2024) emphasizes that recent chokepoint disruptions have raised freight costs through rerouting, port congestion, and higher operational costs, with particularly acute effects for vulnerable economies. Carrière-Swallow et al. (2022) show that shipping-cost increases are followed by significant increases in import prices, producer prices, and consumer inflation. This matters for Africa because even cargoes that do not transit Hormuz may still become more expensive when tanker markets tighten, insurance premiums rise, and Asian manufacturing exporters face higher logistics costs.

#### 4.3.3. Exchange-Rate Amplification

The third channel is the exchange rate, and in many African economies it is the decisive amplifier. IMF (2023) estimates that, for Sub-Saharan Africa as a whole, a 1 percentage point increase in the rate of depreciation against the U.S. dollar raises inflation by about 0.22 percentage points within the first year, with pass-through reaching 0.28 in non-pegged regimes. The same analytical note reports that reserve buffers were below three months of imports in about 40% of non-pegged countries on average during 2022. Kemoe et al. (2024) deepen this point by showing that pass-through is higher in large and persistent depreciation episodes and strongly asymmetric during depreciations. The implication is that even if fuel prices are temporarily smoothed administratively, a widening import bill and reserve loss can reintroduce inflation through currency weakness. In practice, a Hormuz shock can move from shipping lanes to the exchange window and then to the consumer basket.

#### 4.3.4. Fertilizer and Food-System Channel

The fourth channel is slower but often more socially damaging. FAO and WTO (2022) show that fertilizer production, especially nitrogen fertilizer, is deeply dependent on energy inputs and globally concentrated trade. A sustained rise in gas prices, shipping costs, or insurance costs therefore raises fertilizer prices and can reduce fertilizer use. Banque de France (2022) and Lemaire and Vertier (2023) show that, in Africa, fertilizer-related pass-through becomes more visible at longer horizons than the immediate energy effect. This temporal profile is crucial. Governments often respond first to visible pump-price politics, yet medium-run food inflation may prove more persistent because it operates through planting decisions, yields, import bills for agro-inputs, and food distribution costs. In high-food-share consumption baskets, that delayed transmission has major welfare implications.

#### 4.3.5. Asia-Linked Manufactures and Capital-Goods Channel

The fifth channel links Africa's trade structure to Asia's cost structure. UNCTAD (2025) shows that Asia absorbs a large share of African trade, while UNCTAD's data hub indicates that Africa runs a heavy manufactured-goods deficit and imported almost four times more manufactured goods than it exported in 2024 (UNCTAD, n.d.). The consequence is that higher Asian energy costs, freight costs, and insurance premiums can be transmitted into African prices through machinery, electrical equipment, chemicals, plastics, transport equipment, and other manufactures. The ITC residual tables, despite their limitations, are consistent with this broader pattern because the visible residual exports from Asia to the African residual category are dominated by machinery and electrical goods rather than by fuels or fertilizers. This is one reason the Asia linkage matters analytically: it is a major indirect transmission route for inflationary pressure.

#### 4.4. Differential Vulnerability Across African Economy Types

The evidence points toward differentiated rather than uniform vulnerability. The most immediately exposed economies are net fuel importers with weak reserve positions and non-pegged exchange-rate regimes. For them, higher landed fuel costs and depreciation pressure reinforce each other (IMF, 2023; Kemo et al., 2024). A second group comprises crude exporters that still import refined fuels and operate politically constrained domestic pricing systems. They may benefit from higher crude prices at the export margin while simultaneously facing domestic fuel inflation, subsidy stress, or shortages (World Bank, 2025; IEA, 2022). A third group comprises fertilizer-dependent agrarian economies in which the short-run fuel problem may be administratively buffered but the medium-run food problem intensifies through input scarcity and high transport costs (FAO & WTO, 2022; Lemaire & Vertier, 2023). A fourth group comprises coastal gateways and trade hubs that are particularly exposed to freight, insurance, and congestion spillovers. A fifth group comprises landlocked import-dependent economies, where every external freight shock is multiplied by inland corridor costs and border delays (Marteau et al., 2007; Arvis et al., 2023). AfDB (2025) is especially relevant here because it stresses that Africa's growth outlook remains vulnerable to external shocks and uneven policy space, which means buffering capacity cannot be assumed away. Table 3 synthesizes these illustrative vulnerability archetypes by pairing each economy type with its dominant transmission channels, principal macro risk, and priority policy focus.

**Table 3.** Illustrative vulnerability archetypes and principal transmission mechanisms.

Economy type	Dominant channels	Main macro risk	Priority policy focus
Net fuel importers with thin reserves and non-pegged regimes	Fuel import exchange-rate through, freight	Rapid acceleration and reserve depletion	CPI and prioritization, monetary credibility
Crude exporters that import refined fuels	Refined-product subsidy domestic politics	costs, pressure, pricing	Fiscal stress and shortages despite export receipts
Fertilizer-dependent agrarian economies	Fertilizer prices, import logistics, food-system pass-through	Delayed but persistent inflation	but food seasonal agronomic support
			Transparent pricing rules, targeted compensation, storage and refining coordination
			Pooled procurement, seasonal financing, efficiency support

Coastal gateways and trade hubs	Freight, insurance, congestion, port delays	Imported-cost pass-through and supply-chain bottlenecks	Port efficiency, customs predictability, contingency logistics monitoring
Landlocked import-dependent economies	Maritime shock plus inland corridor amplification	High landed costs and local shortages	Corridor coordination, buffer stocks, border and transit facilitation

*Note.* Author's synthesis of the evidence reviewed in Sections 4.3 and 4.4 using the exposure–transmission–buffering framework. The typology is intended to clarify policy differentiation rather than classify all countries exhaustively

#### 4.5. Scenario Implications

The scenario framework is intentionally bounded rather than predictive. In a contained disruption, insecurity raises risk premia and landed costs, but partial restoration of flows within weeks limits the depth of second-round effects. In that case, retail inflation depends heavily on domestic pricing rules and the degree of reserve loss. In a moderate prolonged disruption lasting several months, shipping costs and war-risk premia become more persistent, exchange-rate stress becomes more likely, and the fertilizer channel begins to intensify across planting and harvest cycles. In a severe disruption with sustained impairment of Hormuz-linked flows, the problem becomes broader than inflation alone. It encompasses reserve exhaustion, fuel and LPG shortages, fiscal deterioration, industrial input bottlenecks, and a much higher probability that households experience both transport and food price shocks simultaneously. The practical analytical gain from this scenario structure is that it keeps first-round and second-round effects conceptually distinct. That distinction is indispensable for policy design (UNCTAD, 2024; Carrière-Swallow et al., 2022; IMF, 2023; FAO & WTO, 2022; Lemaire & Vertier, 2023).

## 5. Discussion

### 5.1. Why Africa's Principal Exposure Is Indirect and Systemic

The core finding of this article is that Africa's exposure to a Hormuz shock is predominantly indirect and systemic. The residual ITC Trade Map tables summarized in Table 1 are valuable precisely because they reveal the danger of overstressing thin bilateral evidence. Once the residual classification is treated correctly, the real picture emerges. Table 1 therefore serves as a warning against category error, whereas Table 2 locates the argument at the appropriate continental scale. Africa's vulnerability lies in its dependence on Asia-linked manufactures, imported fuel, imported agro-inputs, maritime freight, and foreign exchange stability. In that sense, the paper's theoretical payoff is to show that distance from the chokepoint does not determine vulnerability. Trade structure and buffering capacity do. A Gulf maritime shock can become an African inflation shock because the global economy is organized through interdependent networks in which Asia is both a primary destination for Hormuz-linked energy and a primary supplier to African import demand (EIA, 2025a, 2025b; IEA, n.d.; UNCTAD, 2025).

### 5.2. Timing, Sequencing, and the Politics of Misdiagnosis

The evidence also implies that timing matters analytically and politically. The first visible effect of a Hormuz disruption may be at the pump or in transport tariffs, but the most stubborn effect may appear later through fertilizer affordability, food costs, and the exchange rate (Banque de France, 2022; Lemaire & Vertier, 2023; IMF, 2023). Policy debate often misdiagnoses shocks because governments respond to the price that is immediately salient rather than the channel that is most durable. That tendency can produce a form of temporal policy error: excessive attention to universal

short-run fuel suppression combined with insufficient attention to reserve adequacy, fertilizer procurement, and targeted household protection. A theoretically serious manuscript must therefore distinguish not only channels but also horizons. The same external shock can be politically interpreted as an energy crisis, economically transmitted as a currency crisis, and socially experienced as a food-security crisis.

### 5.3. Policy Ethics Under Uncertainty

A further implication is normative. Policy advice under uncertainty is not ethically neutral because all stabilization tools redistribute burdens across groups and time. Broad price suppression can relieve immediate hardship, but it can also transfer the burden into reserve depletion, arrears, shortages, or fiscal compression that later harms the same households more severely. Conversely, strict pass-through in the name of macroeconomic credibility can stabilize expectations while imposing immediate welfare losses on the poor. The relevant question is therefore not whether policy can avoid trade-offs. It cannot. The question is whether policy can make those trade-offs explicit, transparent, and proportionate. For African states, defensible policy is the policy that protects vulnerable households and critical logistics without eroding the institutional credibility needed to prevent a temporary external shock from becoming a deeper governance crisis.

## 6. Policy Implications

### 6.1. Immediate Shock Management

The immediate priority should be targeted protection rather than blanket price suppression. World Bank (2025) shows that broad fuel subsidies and price controls frequently create fiscal strain and can be associated with shortages, smuggling, and market distortions when maintained for long periods. That does not mean governments should do nothing in the face of a sharp external shock. It means support should be explicit, time-bound, and targeted toward vulnerable households, essential public transport, electricity generation, food distribution, and other critical uses. Universal suppression is a blunt instrument. In a reserve-constrained setting, it can postpone the shock only by relocating it to the budget, the balance of payments, or the queue.

Foreign-exchange prioritization should therefore be formalized before market conditions deteriorate further. Where reserves are thin, finance ministries and central banks should establish transparent priority windows for fuel for power and logistics, key food imports, fertilizers, medicines, and indispensable industrial inputs. IMF (2023) is clear that administrative responses proliferate when reserves run low, but opacity increases the risk of rent extraction and confidence loss. Pre-announced prioritization criteria are preferable to improvised rationing. In parallel, governments should intensify logistics monitoring of ports, corridor delays, and shipping schedules, because even modest informational gains can materially improve procurement sequencing and inventory management during an external shock (UNCTAD, 2024; Arvis et al., 2023).

### 6.2. Medium-Run Resilience

Medium-run resilience depends on reducing the mechanisms that turn external cost shocks into domestic inflation persistence. Fertilizer access should be treated as a macro-critical food-security issue rather than a narrow agricultural input problem (FAO & WTO, 2022; Lemaire & Vertier, 2023). Regional pooled procurement, trade-finance support for seasonal imports, and measures that improve fertilizer-use efficiency can reduce the risk that one maritime disruption produces multiple harvest setbacks (AfDB, n.d.). Corridor efficiency also matters. Reducing port dwell time, customs unpredictability, and inland transport bottlenecks cannot eliminate a global freight shock, but it can lower the domestic markup applied to it. In economies where shipping costs already sit on top of weak inland logistics, that margin is policy-relevant (Arvis et al., 2023; Marteau et al., 2007).

Credible contingency frameworks also belong in the medium-run agenda. A state that announces targeted, temporary support alongside financing plans, sunset clauses, and a credible

monetary stance is better placed to prevent temporary buffering from becoming macroeconomic destabilization. In other words, resilience is not only about physical infrastructure or supplier diversification. It is also about institutional design. Administrative credibility is itself a shock absorber (Titus et al., 2026).

### 6.3. Long-Run Structural Transformation

Long-run resilience requires structural change. Africa's heavy manufactured-goods deficit and dependence on long-distance imports mean that external shipping and energy shocks are transmitted quickly into domestic prices. AfCFTA-oriented regionalization should therefore be understood not only as a development strategy but also as a risk-reduction strategy (Murungu et al., 2025). Priority areas include agro-processing, selected chemical and fertilizer value chains, regional maintenance and repair ecosystems, and assembly or light manufacturing segments where import dependence is especially costly during external disruptions. Not every country can industrialize across every segment, but coordinated regional specialization can still lower structural vulnerability (Murungu et al., 2025).

Energy strategy also needs to move beyond crude-export status as a proxy for security. Countries that export crude while importing refined fuels remain exposed to imported inflation and subsidy stress when refining or shipping conditions tighten (IEA, 2022). Regional storage coordination, better refining integration where economically viable, transparent fuel-pricing formulas, and investment that reduces diesel dependence in power generation and logistics are all part of a more serious resilience agenda (IEA, 2022). The same logic applies to social protection. Scalable and well-targeted transfer systems are not only social policy. They are macroeconomic instruments that allow governments to protect households without defaulting to universal controls that undermine long-run stability.

## 7. Conclusions

The Strait of Hormuz matters for Africa not because Africa is geographically close to the Gulf, but because African economies are embedded in the channels through which a Hormuz disruption travels. The residual ITC Trade Map series summarized in Table 1, once interpreted correctly, do not show continent-wide exposure. They show a tiny residual bilateral relationship that is far too narrow and distorted to support sweeping claims. The continent-wide story emerges only when the residual evidence in Table 1 is disciplined by the continent-scale trade evidence summarized in Table 2 and by mechanism-specific evidence on energy transit, shipping costs, exchange-rate pass-through, fertilizer dependence, and manufactured-goods imports.

The substantive conclusion is that Africa's vulnerability is predominantly indirect. A Hormuz shock reaches African consumers through oil and LNG repricing, freight and war-risk insurance, exchange-rate depreciation, fertilizer-mediated food inflation, and the higher cost of Asia-sourced manufactures. The policy conclusion follows from the analytical one. African states should respond not with false certainty or blanket instruments, but with differentiated and transparent policies that recognize the timing and structure of transmission. Immediate targeted protection, credible foreign-exchange prioritization, medium-run logistics and fertilizer reforms, and long-run structural diversification together offer a more defensible strategy than either passive adjustment or universal subsidy reflexes. The practical lesson is straightforward: a maritime chokepoint shock is also a state-capacity test. Countries that can separate household protection from macroeconomic self-injury will manage it best.

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**Data availability:** All data used in this study were obtained from publicly available sources cited in the manuscript. The ITC Trade Map extracts underlying the product-level bilateral analysis have been archived on the Open Science Framework: <https://doi.org/10.17605/OSF.IO/2FS3Z> (Sangwa et al., 2026). Other materials used in the analysis remain available from their original institutional sources as cited in the reference list. All files are released under a Creative Commons Attribution 4.0 licence.

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