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**The role of local commodity exchanges in managing commodities price volatility in Nigeria:
The case of the Nigerian Commodities Exchange (NCX)**

By

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Nigeria: *The case of the Nigerian Commodities Exchange (NCX)*

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PREFACE

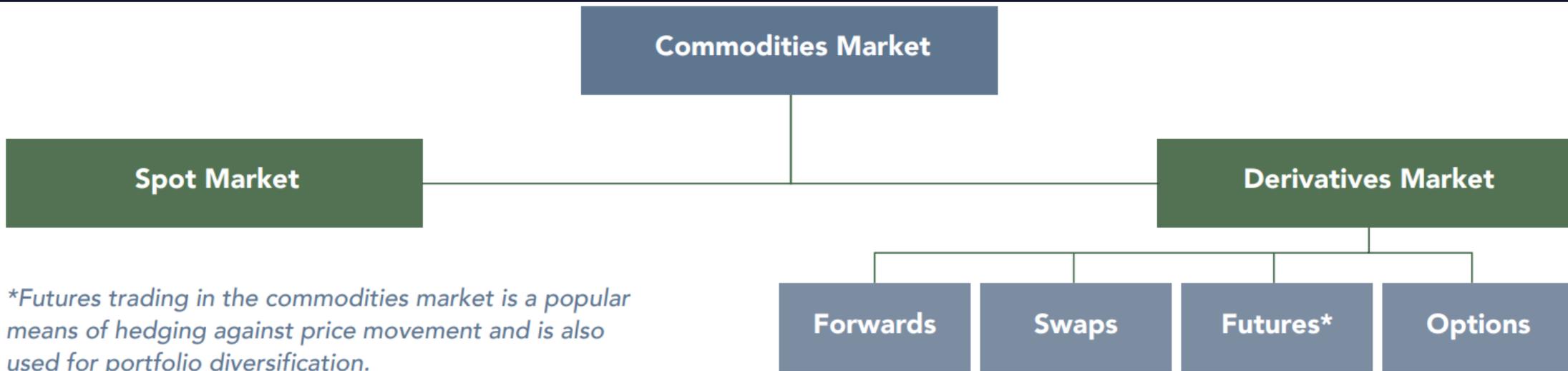
.... A thorough understanding of local commodity exchanges is increasingly crucial, and even more so is a concentrated emphasis on African local commodity exchanges for effectively managing price volatility.... (Omeihe, 2023)



Commodity Exchange Explained



Commodity Exchange Explained



**Futures trading in the commodities market is a popular means of hedging against price movement and is also used for portfolio diversification.*

Commodities can be generally divided into four main categories namely:

- 1. Agriculture Commodities:** These include food crops (maize, cocoa, coffee), cash crops (cotton), livestock (cattle), etc.;
- 2. Energy Commodities:** These include natural gas, crude oil, coal, uranium, ethanol, electricity etc.;
- 3. Metal Commodities:** These include iron ore, zinc, aluminium, steel, nickel, precious metals etc.; and
- 4. Environmental Commodities:** These include renewable energy certificates, carbon emissions etc.

Four lessons that capture the problem statement



1. A notable aspect of recent inquiries into the shortcomings of LCXs is their limited success in unlocking their potential to stimulate agricultural production



2. An inefficient local commodity exchange not only escalates transaction costs but also falls short of assisting buyers and sellers in establishing suitable commodity prices



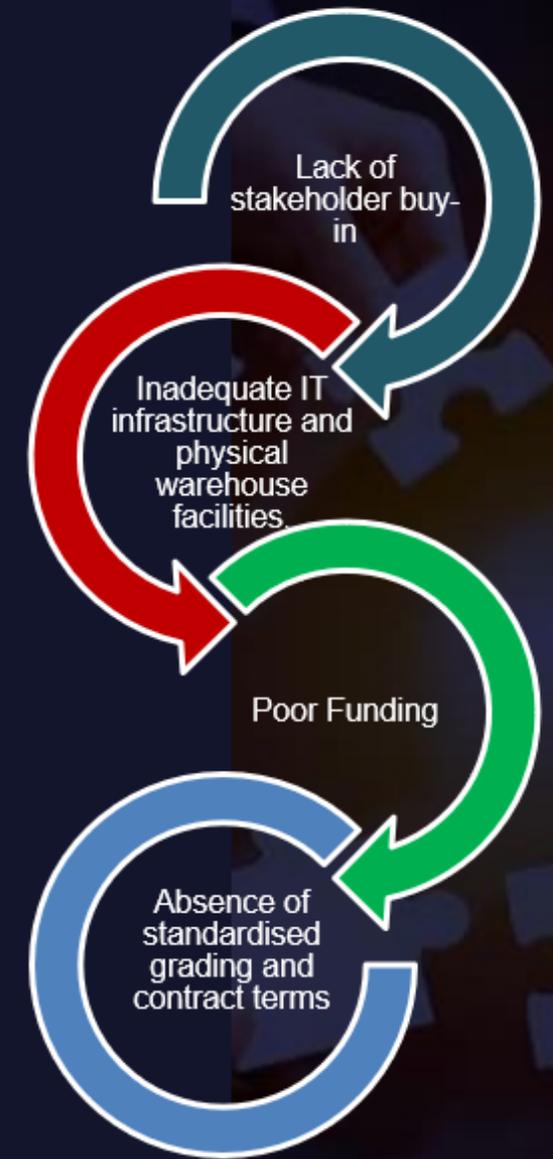
3. One of the significant risk factors for commodity-dependent developing nations is price risk, which impacts all stakeholders within commodity-producing countries' markets



4. The effectiveness of a commodity exchange relies on the number of participants, their educational background, and their understanding of the exchange.

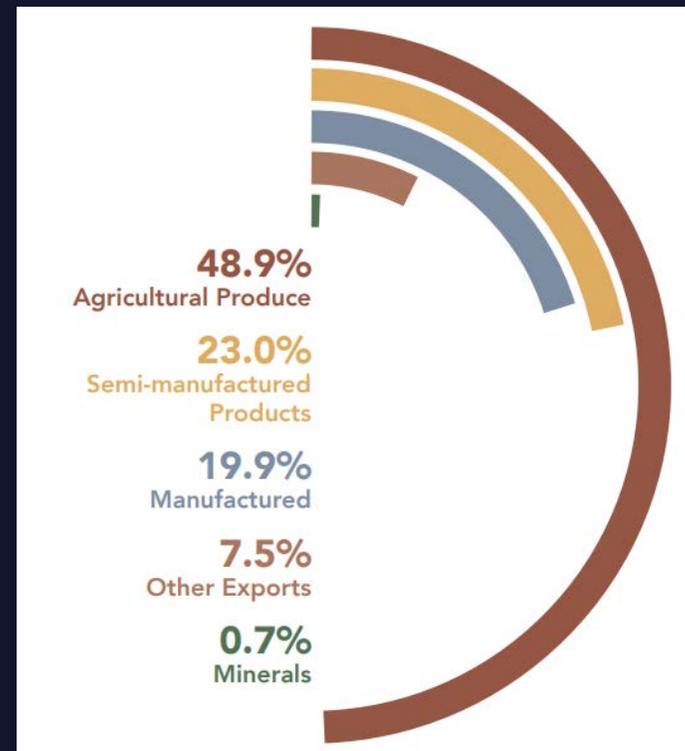
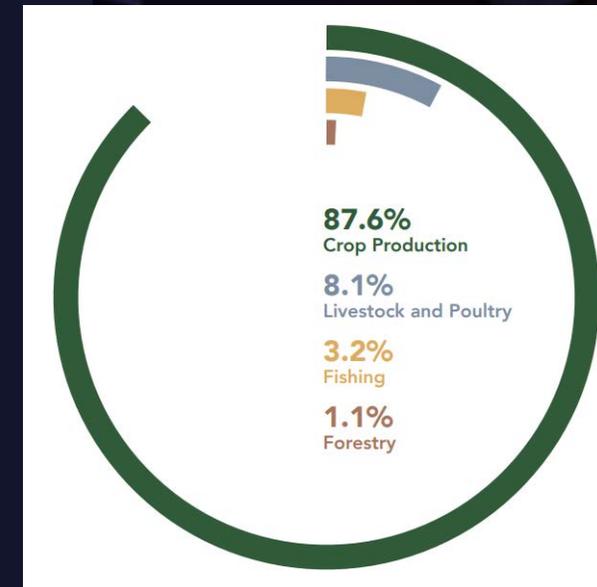
CONTEXT- NIGERIAN COMMODITIES EXCHANGE (NCX)

- Underdeveloped segments of the commodity ecosystem and a lack of enabling legislation including existing laws & regulations
- Shortcomings in establishing a robust corporate governance framework within the NCX and the imperative need for the implementation of efficient risk management procedures
- A deficient overarching strategy at the NCX that restricts collaboration with prosperous commodity exchanges in Africa and beyond
- Absence of financial inclusion initiatives, demanding a need to make financial services affordable to farmers;
- Need for benchmarking, plus a review of the commodity trading structure, practices and ecosystems in India, Brazil, Ethiopia (others i.e Malawi, Rwanda and South Africa)
- These concerns demand swift attention to facilitate agricultural production at the farm level and alleviate the substantial revenue losses endured by farmers
- The government has devised strategies to revamp the Nigeria Commodity Exchange (NCX), with the objective of enhancing agricultural productivity, enhancing price determination and transparency, and stabilising food prices



Top 10 Agricultural Exports from Nigeria in 2020

S/N	Products	FOB Value (USD)
1	Cocoa Beans	570,808,878
2	Sesame Seeds	254,037,697
3	Cashew Nuts	47,364,449
4	Rubber	42,245,939
5	Beef/Crustaceans	41,768,864
6	Coffee	15,323,789
7	Cotton	14,832,989
8	Ginger	11,986,858
9	Hibiscus Flower	4,595,462
10	Groundnuts	1,246,790



Non-Oil Export by Product in Percentage (2020)

Top Ten Crop Producing States vis-à-vis Available Storage Facilities

S/N	State	2-Year Average (2017- 2018) Crop Output (MT)	Available Silo Capacity (MT)	Available Warehouses* (MT)
1	Kaduna	1,935,914	25,000	8,000
2	Kano	1,843,019	25,000	2,000
3	Niger	1,799,270	25,000	0
4	Kebbi	1,331,454	100,000	2,000
5	Kogi	1,328,934	25,000	0
6	Nasarawa	1,273,849	25,000	0
7	Katsina	1,282,920	25,000	2,000
8	Taraba	1,297,825	25,000	0
9	Plateau	1,227,142	25,000	0
10	Benue	1,160,838	25,000	0
Total		14,481,165	325,000	14,000

Commodity Price Volatility

(1) Volatility is an indicator of variation over a specific time frame.

(2) Volatility can emerge due to factors such as transportation costs, trade tariffs and fragmentation of the market (E.g.) In the natural gas market, where a substantial portion of traded volumes is distributed via pipelines)

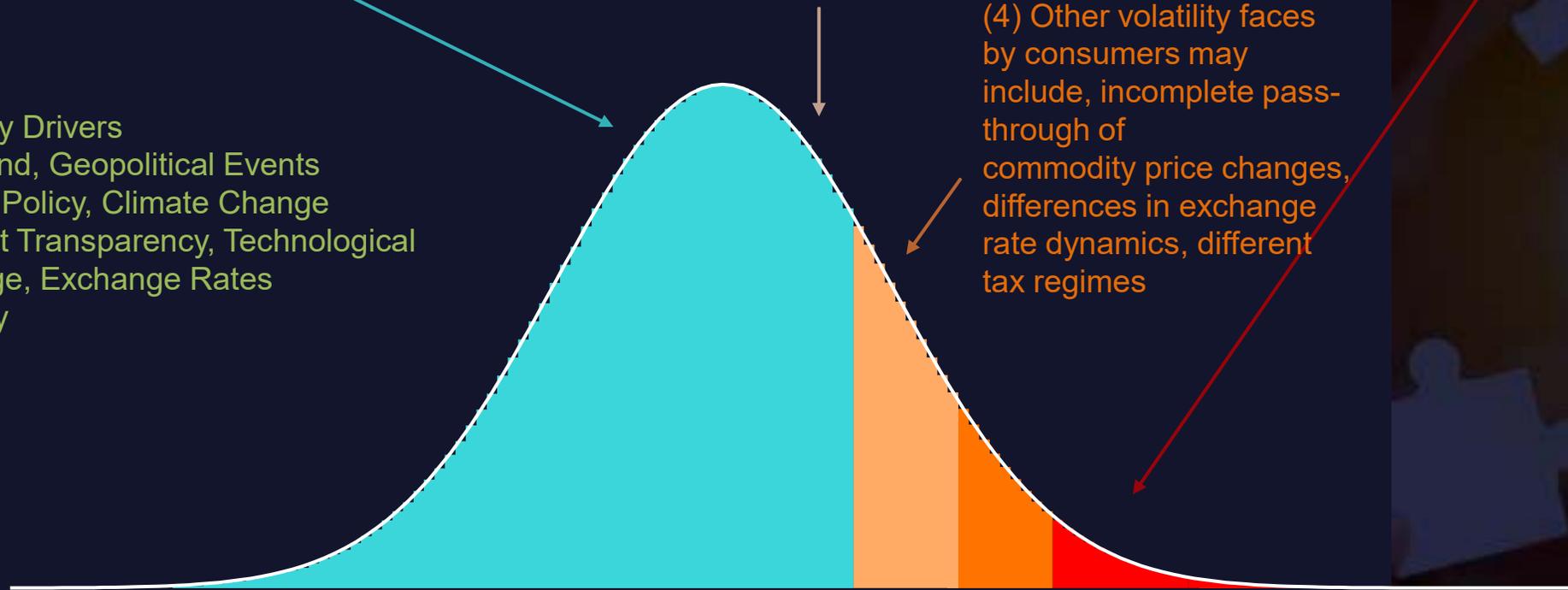
(3) For one thing, the question becomes one of establishing how price volatility can be managed?

(5) Key Drivers

Demand, Geopolitical Events
Trade Policy, Climate Change
Market Transparency, Technological Change, Exchange Rates
Supply

(4) Other volatility faces by consumers may include, incomplete pass-through of commodity price changes, differences in exchange rate dynamics, different tax regimes

Frequency

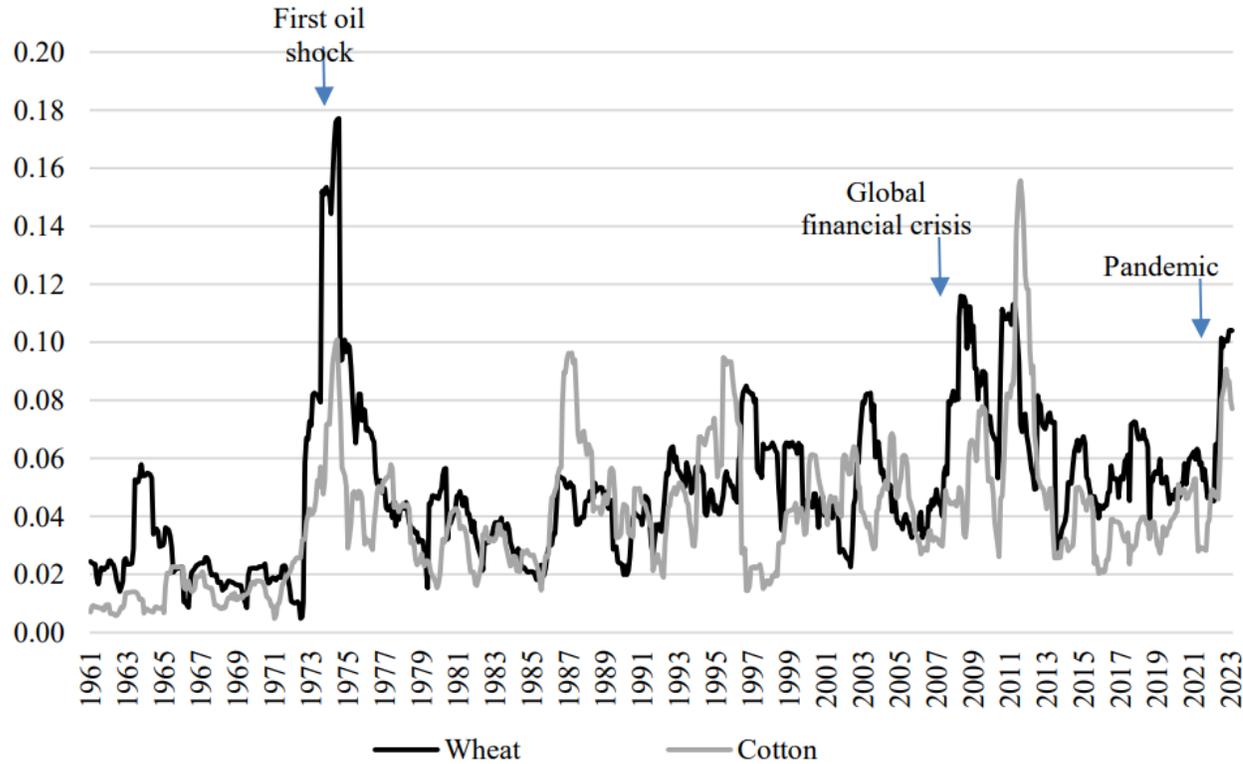


Assumption of PV

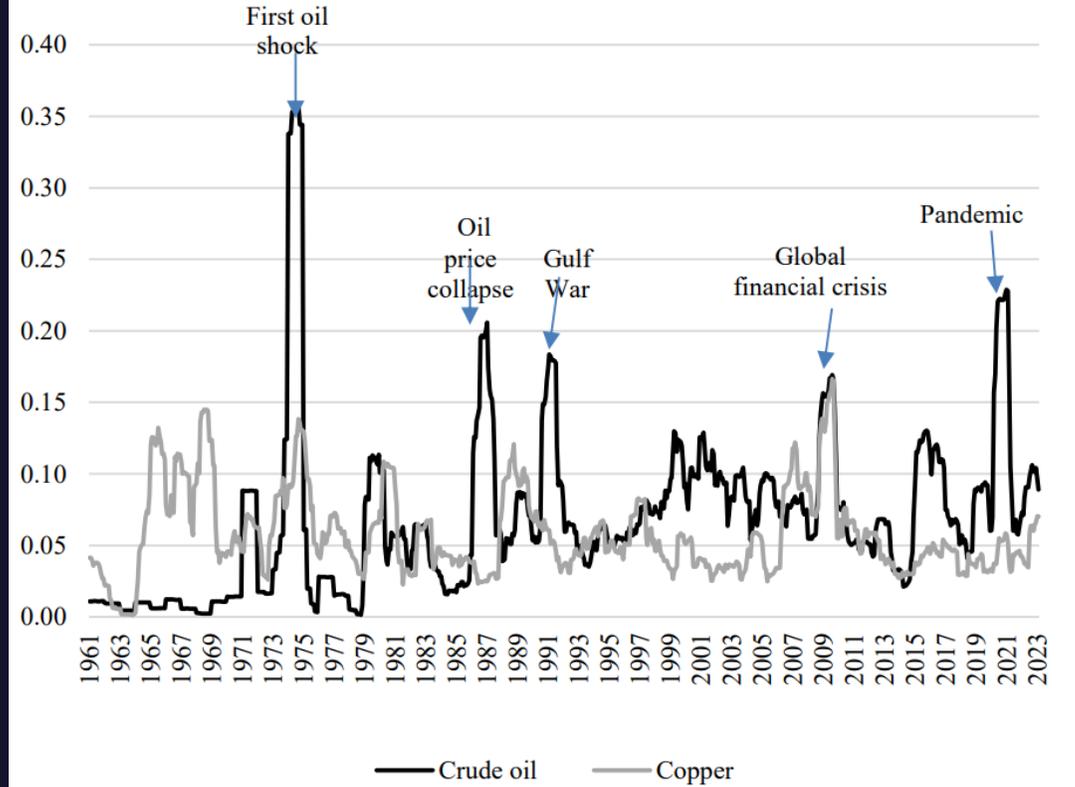
The Interplay of Factors Influencing Price Volatility

	Meso-Level Supply Factors (MSF) Located in the Individual Commodity Markets	Macro-Level Demand Factors (MDF)-Located at the Global Activities
Cyclical Shocks	Meso-Level Shocks: On the meso-level supply side, commodity price volatility can be driven by cyclical or periodical factors, such as seasonality in agricultural markets and unexpected production shortfalls	The global pandemic had a substantial influence on fluctuations in global commodity prices. travel restrictions resulted in decreased prices for commodities, including oil, metals, and agricultural products
Intermittent Shocks	Intermittent: Weather occurrences are challenging to forecast and can frequently lead to supply disruptions in commodity markets, especially within the agricultural sector. E.g., <i>adverse weather conditions in Thailand/Australia led to a decrease in rice production and subsequent price hikes</i>	An expansive monetary policy marked by low interest rates can lead to overall demand and bolster economic growth, potentially resulting in heightened demand for commodities.
Restrictive Shocks	Targeted: Disease and pest outbreaks can lead to meso-level shocks (40% and 250billion USD Lost)	Targeted: Imposing constraints on trade, such as restrictions on the export of food or outright bans, led to instability during periods of crisis
Backstop Shocks	Backstop bottlenecks: Labor Disputes and Work-Related Disagreements can result in delays and interruptions in production, consequently causing meso-level supply disruptions.	Speculators (investors) also have an impact on fluctuations in commodity prices, regarding commodity prices using futures, options, and various financial tools.

Volatility of wheat and cotton prices



Volatility of crude oil and copper prices



Managing Price Volatility Risks by the NCX caused by MSF and MDF(Systemic shocks)

Institutional Logics (Omeihe, 2023)

Stewardship

Enhancing market transparency, delivering timely and precise information can be achieved through the utilization of information and communication technology (ICT).

Financing and technical capacity needs for climate adaptation

Market Risk

Political Risk

...put succinctly, it presupposes an understanding of NCX behaviour located within social and institutional contexts

Establish sufficient storage infrastructure and perform accurate analysis and forecasting to minimize disparities between anticipated and real demand.

Demand Risk

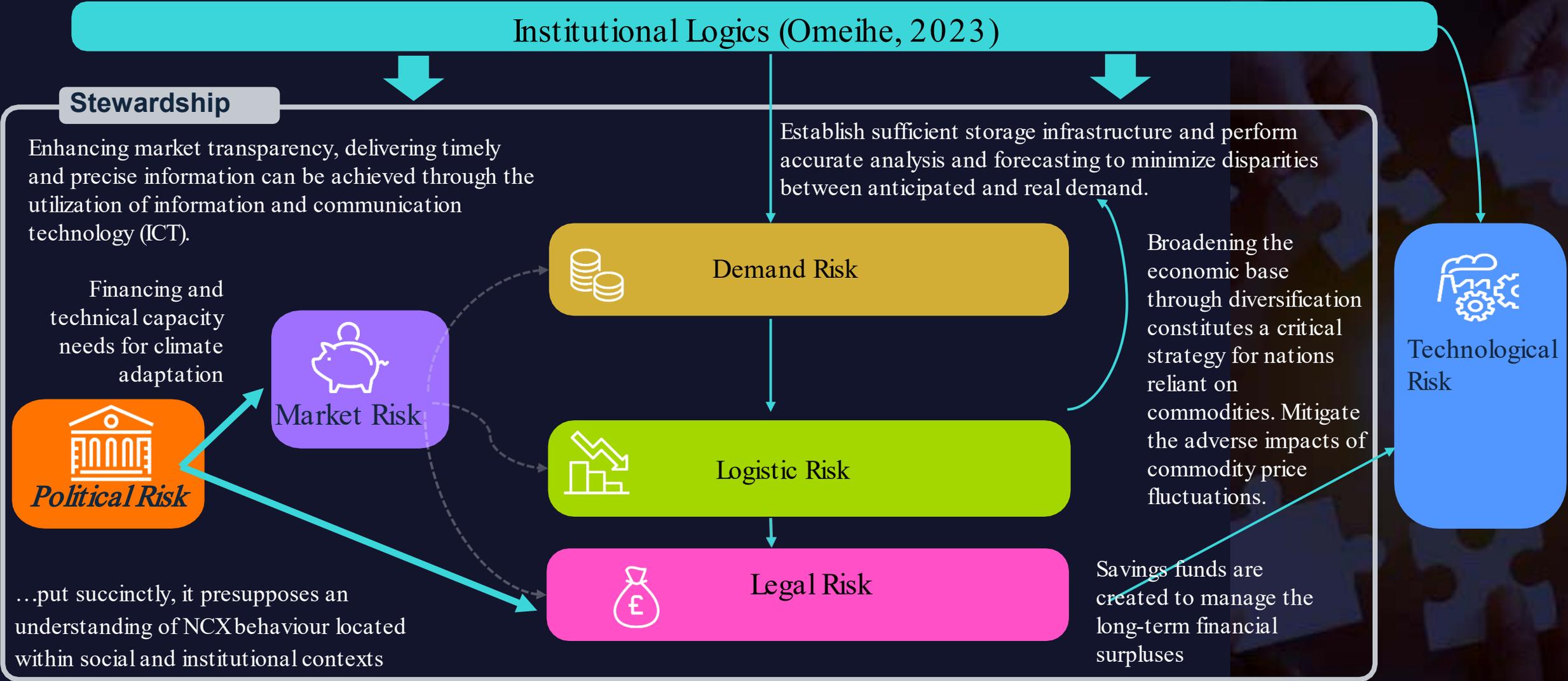
Broadening the economic base through diversification constitutes a critical strategy for nations reliant on commodities. Mitigate the adverse impacts of commodity price fluctuations.

Logistic Risk

Legal Risk

Savings funds are created to manage the long-term financial surpluses

Technological Risk



SUMMARY AND DIRECTION

Transparency.
Trading platforms,
warehouse receipts

Improve storage,
grading standards

Improve efficiency of
trading platform eg
single platform NSE

New Regulations to attract
private sector investments

Encourage trust with
smallholder farmers'
associations and encourage
them to trade on exchange

Strengthen
financial
institutions and
mechanisms

Fiscal buffers can act as
an insurance against fiscal
distress in the
event of commodity price
drops.

Overall Institutional
Reforms and
establishing a new
NCX blueprint

Encourage Traceability
and Global GAP
Certification.

Synergies across MDA
and relevant ministries

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