



“AGRICULTURE UNDER TRADE SHOCKS AND POLICY UNCERTAINTY: A SECTORAL STUDY IN INDIA

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Abstract

Agriculture in India plays a crucial role in ensuring food security, employment, and rural livelihoods. In recent years, the sector has been increasingly affected by trade shocks such as sudden changes in export–import policies, global price fluctuations, tariffs, sanctions, and disruptions in international supply chains, along with policy uncertainty related to minimum support prices (MSP), export bans, subsidy reforms, and trade agreements. These factors create instability in agricultural markets and directly influence farmers’ production decisions, income levels, and investment behaviour. This sectoral study examines the impact of trade shocks and policy uncertainty on major agricultural sub-sectors in India, including cereals, pulses, oilseeds, cotton, sugarcane, horticulture, and livestock. Using secondary data from government reports, trade statistics, and agricultural output trends, the study analyses changes in production, exports, prices, farm incomes, and capital formation in agriculture. The study finds that trade shocks lead to price volatility and income uncertainty for farmers, while unpredictable policy interventions reduce incentives for long-term investment in farm capital and technology adoption. Export restrictions and frequent policy changes particularly affect commercial and export-oriented crops. The study suggests that stable and transparent trade policies, improved market information systems, diversification of export markets, crop diversification, and strengthening of risk management tools such as crop insurance and price stabilization mechanisms are essential to enhance the resilience of Indian agriculture. Ensuring policy consistency can promote sustainable agricultural growth, encourage investment, and protect farmers from external economic shocks.

Keywords: *Trade Shocks Policy, Uncertainty, Indian Agriculture, Price Volatility, Farm income.*

Introduction

Agriculture plays a central role in India’s economic and social development. According to the **Economic Survey of India (2022–23)** published by Ministry of Finance, agriculture and allied sectors contribute significantly to India’s Gross Value Added (GVA) and continue to be a major source of livelihood for a large section of the population. Even though its share in GDP has gradually declined due to structural transformation, agriculture remains vital for inclusive growth and rural stability. India is one of the largest producers of rice, wheat, pulses, milk, fruits, and vegetables in the world. The sector supports not only domestic consumption but also exports, thereby contributing to foreign exchange earnings. Thus, agriculture is not merely a production activity but a foundation of national economic security.

Agriculture ensures **food security** by maintaining adequate production of essential food grains. Government procurement systems and the Public Distribution System (PDS) depend heavily on stable agricultural output to supply subsidized food to millions of households. In terms of **employment**, the



Economic Survey highlights that nearly half of India's workforce is still engaged in agriculture and allied activities. This makes it the largest employment-generating sector, particularly in rural areas. Regarding **rural livelihoods**, agriculture serves as the primary source of income for small and marginal farmers. Growth in agricultural productivity directly contributes to poverty reduction, improved living standards, and rural development. Therefore, the stability of the agricultural sector is closely linked with social welfare and economic equality in India.

Need for the Study

With increasing globalization, Indian agriculture has become more integrated with global markets. According to the Economic Survey (2022–23), fluctuations in global commodity prices, export restrictions, tariff changes, and international supply chain disruptions significantly influence domestic agricultural prices and farmer incomes. These sudden changes are referred to as **trade shocks**. Additionally, uncertainty regarding government policies-such as Minimum Support Price (MSP) revisions, export bans, subsidy reforms, and trade agreements-can affect farmers' production and investment decisions. Policy instability may discourage long-term investments in technology and productivity improvements. Therefore, studying trade shocks and policy uncertainty is essential to design stable, predictable, and farmer-friendly policies that ensure income security, price stability, and sustainable agricultural growth.

Theoretical Background

Price Volatility Theory

Price volatility theory explains how prices fluctuate due to changes in demand, supply, speculation, and external shocks. According to the World Bank (2020), countries integrated into global value chains experience stronger price transmission from international markets to domestic markets.

In agriculture, volatility may arise from:

- Weather shocks
- Export restrictions
- Changes in global commodity demand
- Trade policy shifts

For India, integration with global agricultural markets means international price movements can influence domestic crop prices, creating instability for farmers and consumers.

Risk and Uncertainty in Agriculture

Agriculture is inherently risky due to dependence on climate, biological processes, and market conditions. The World Bank (2020) highlights that policy unpredictability and trade shocks increase economic uncertainty, affecting farmers' investment and production decisions.

Risk refers to situations where probabilities are known (e.g., seasonal rainfall patterns), while uncertainty refers to unpredictable policy or market changes (e.g., sudden export bans).

Under uncertainty, farmers may:

- Reduce investment in high-value crops
- Shift to low-risk subsistence crops
- Delay technology adoption

This behaviour affects productivity and long-term sectoral growth.



Market Integration and Global Price Transmission

Market integration theory suggests that when economies are connected through trade, price changes in one country are transmitted to others. The World Bank (2020) explains that global value chains increase interdependence among countries, meaning domestic agricultural markets respond more quickly to international price movements.

For India:

- Global wheat or rice price increases may raise domestic prices.
- Import tariff changes can alter domestic supply and price levels.
- Export restrictions can disconnect domestic prices from world markets.

Thus, trade shocks combined with domestic policy actions determine the extent of price transmission and market stability.

Concept of Trade Shocks

Meaning of Trade Shocks

Trade shocks refer to sudden and unexpected changes in international trade conditions that affect a country's exports, imports, prices, and domestic markets. According to World Bank (2020), trade shocks arise from disruptions such as tariff changes, export restrictions, global price volatility, and supply chain interruptions. These shocks can significantly influence agricultural production, farmer income, and food prices, especially in developing countries like India that are increasingly integrated into global markets.

Types of Trade Shocks

1. Export–Import Policy Changes: Governments may suddenly impose export bans, increase import duties, or revise trade agreements to protect domestic markets. For example, restrictions on agricultural exports to control domestic inflation can reduce farmers' access to global markets. Such policy shifts create uncertainty and affect production and investment decisions.

2. Global Price Fluctuations: International commodity prices often fluctuate due to changes in global demand and supply, oil prices, climate conditions, or geopolitical tensions. The World Bank (2020) highlights that volatility in global food prices directly impacts domestic markets through trade linkages, influencing farm income and consumer prices.

3. Tariffs and Sanctions: Tariffs (taxes on imports or exports) increase the cost of traded goods, while economic sanctions restrict trade with specific countries. These measures can alter trade flows, reduce export competitiveness, and increase input costs for farmers. Sudden tariff hikes can negatively affect agricultural exports and profitability.

4. International Supply Chain Disruptions: Global supply chains connect producers, processors, transporters, and consumers across countries. Disruptions—such as pandemics, wars, shipping delays, container shortages, or port congestion—can interrupt the movement of goods. The World Bank (2020) notes that during global crises, supply chain disruptions led to delays in agricultural exports and shortages of imported inputs like fertilizers and machinery. Such interruptions increase costs, reduce market access, and create instability in agricultural markets.

3. Policy Uncertainty in Indian Agriculture

Policy uncertainty in Indian agriculture arises from frequent and unpredictable changes in government trade and domestic policy instruments. As explained in the *India: Agricultural Policy Monitoring and*



Evaluation 2025 report by the Organisation for Economic Co-operation and Development, such policies—especially in areas like price support, export rules, subsidies and trade agreements—create an uncertain environment for farmers, traders, and agribusinesses, affecting their production and investment decisions.

Minimum Support Price (MSP) Changes

Minimum Support Prices are set by the government to provide a price floor for key crops, ensuring a minimum return to farmers and stabilizing rural incomes. However, the OECD report shows that frequent MSP revisions and their uneven implementation across states lead to uncertainty among farmers over expected returns, influencing the choice of crops planted and input usage.

Export Bans and Trade Restrictions

The government's use of export bans and other **export policy interventions** (e.g., on rice and broken rice) has varied over time. These policy swings—introduced to protect domestic supply or control inflation—can result in sudden shifts in market opportunities for producers and exporters, eroding long-term confidence in international markets. The 2025 OECD monitoring report highlights the removal of some restrictions in 2024–25 but notes how past erratic policies can damage export reliability.

Subsidy Reforms

Subsidies for credit (like the Kisan Credit Card), inputs (fertilizers and electricity), and sectoral support programmes are critical for reducing farmers' production costs. The OECD review highlights **changes in budgetary allocations** and support levels, indicating that adjustments to subsidy schemes—including increases or restructuring—create ambiguity about future support levels, affecting farmers' financial planning and market behaviour.

Trade Agreements and Their Impact

Trade agreements influence tariff schedules and market access for farm products. The report notes India's March 2024 Trade and Economic Partnership Agreement (TEPA) with the European Free Trade Association (EFTA), which reduces tariffs on many agricultural products but excludes sensitive sectors. Because of such exclusions and still-ongoing negotiations, potential market access and competitive pressures remain uncertain, affecting export strategies and planning for Indian producers.





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Cereals (Rice and Wheat)

Production and Export Trends

1. India's **foodgrain production** reached a record ~3,539.59 LMT in 2024–25, with **rice at ~1,490.74 LMT** and wheat also high.
2. India is a leading global supplier of rice, and in 2024–25 agricultural exports were valued at **~US\$51.2 billion**, led by cereals and other products.



Impact of Export Bans

1. After export restrictions on rice and wheat in 2022–23, India gradually lifted all rice export bans by March 2025 to take advantage of surplus stocks.
2. For example, rice exports are forecast to reach ~22.5 million tons in 2025, around 25% higher than the previous year.
3. These export restrictions previously reduced competitiveness and delayed shipments, illustrating how policy uncertainty affects market confidence and global buyer relationships.

Example: Record rice stockpiles in 2025 prompted a shift to ethanol production—allocating ~5.2 million tons to ethanol use, compared to just 3,000 tons the year before.

5.2 Pulses and Oilseeds

Import Dependence

1. Despite increases in foodgrain output, India continues to import large quantities of pulses and edible oils. In 2024–25, pulses imports reached ~7.3 million tons (~US\$5.5 billion).
2. Edible oils like palm, soybean, and sunflower remain import-dependent due to domestic demand outstripping production.

Tariff Policy Changes

1. To protect farmers, India raised tariffs on imported edible oils (for example, increasing duties on crude palm, soybean and sunflower oils in 2024).
2. Recent tariff changes on yellow peas include a 10% import duty plus an additional 20% cess, aimed at shielding domestic pulses from cheap imports.

Example: Higher tariffs on edible oils and pulses help support domestic mandis (markets), but also raise consumer prices—showing trade policy’s impact on supply chains and price stability.

Commercial Crops (Cotton and Sugarcane)

Export-Oriented Risks

1. Cotton imports surged in 2024–25: ~4.13 million bales were imported (the highest in five years) mainly due to price differences with global markets.
2. Tariff waiver and reinstatement in late 2025 illustrated how policy changes to support textile industry supply can create risk exposure for domestic cotton farmers.

Global Price Impact: International price pressures and duty changes mean domestic cotton prices sometimes lag behind global benchmarks, reducing profit margins for farmers.

Example: Sugar export quotas (e.g., an extra 500,000 tons approved by the government) were meant to ease farmer incomes in early 2026, but global sugar prices remain weak, limiting benefits.

Horticulture Sector

Fruits and Vegetables Exports

1. Horticulture output has grown steadily, with India producing ~367 million tons in 2024–25, surpassing foodgrain production.
2. Maharashtra recorded key agro-food exports, where fruits like bananas (~ 2,839 crore) and grapes (~ 2,781 crore) contributed strongly.



Supply Chain Challenges: Perishability makes horticultural exports highly sensitive to logistics delays, cold-chain gaps, and trade barriers, illustrating how supply chain issues impact trade realization.

Example: Andhra Pradesh's 2026–27 agricultural budget includes ~ 1,223 crore to bolster horticulture exports—showing the policy focus on export infrastructure.

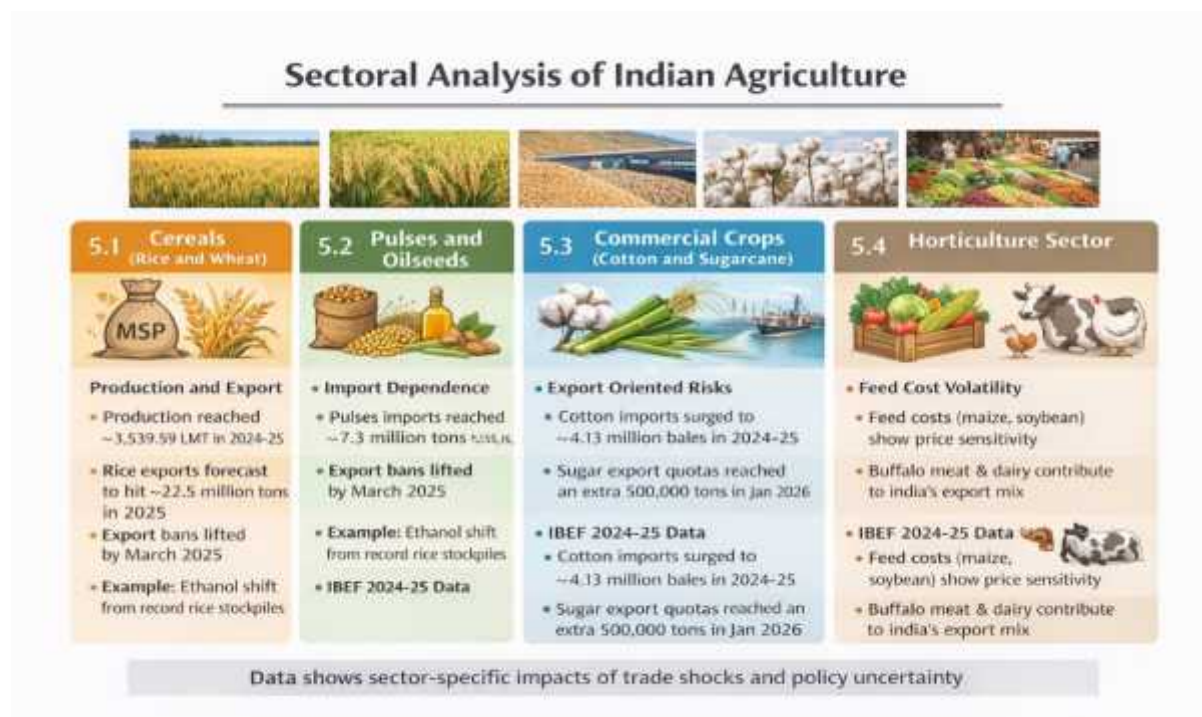
Livestock Sector

Feed Cost Volatility

1. While not quantified in the same datasets, livestock growth has been a key driver, with allied sectors (including livestock) posting strong growth—~7.1% GVA in recent years.
2. Feed costs such as maize and soybean meals are sensitive to world markets, influencing dairy and poultry margins.

Export Market Fluctuations: India's livestock exports (e.g., buffalo meat, dairy products) contribute meaningfully to farm exports, though global demand shifts can alter price realizations.

Example: Growth in fish production (~140% between 2014–25) and livestock GVA expansion underlines how allied sectors affect overall agriculture resilience.



Impact on Agricultural Markets

Price volatility • Changes in domestic market prices • Transmission of global shocks to local markets

This section explains how trade shocks and policy uncertainty affect agricultural markets in India using **current data (2025–26)** and examples. The analysis is based on insights from the *Economic*



Survey 2025–26 and related trade data, which highlight how policy changes and global conditions influence domestic prices and volatility.

Price Volatility

Price volatility refers to the degree of fluctuation in agricultural commodity prices over time. In 2025–26, volatility in both **global commodity prices and domestic markets** has been significant:

1. Wholesale prices for food items, especially vegetables, rose sharply in January 2026, with an 6.78 % year-on-year increase, contributing to a broader surge in wholesale inflation.
2. At the same time, production swings (e.g., bumper potato harvests) led to drastic price swings at the farm gate — potatoes slumped to 6/kg while retail prices remained much higher, indicating unstable price transmission along the supply chain.

Example: A record potato harvest in West Bengal in 2025 caused farm-gate prices to crash despite stable retail prices, demonstrating how oversupply and inadequate storage can increase short-term volatility.

Changes in Domestic Market Prices: Domestic agricultural prices are heavily influenced by both **domestic policies** and **global market forces**:

Export policy adjustments:

1. In early 2026, the government approved exports of ~2.5 million tons of wheat and additional sugar quotas to “placate farmers” and stabilize local supplies after protests over trade deal concerns.
2. Similarly, increasing the sugar export quota helped prevent prices from falling too low after initial domestic price drops.

These shifts show that policy interventions intended to balance supply can themselves trigger price changes in local markets — domestic prices may rise or fall sharply depending on export permissions.

Example: After the export quota was raised for sugar in 2026, local prices that had declined from 44–47/kg to 36–37/kg began stabilizing, highlighting the role policies play in domestic price setting.

Transmission of Global Shocks to Local Markets

Global price movements and trade decisions abroad impact Indian agricultural prices:

1. Following a trade agreement allowing duty-free imports of U.S. soyoil and distillers dried grains (DDGS), Indian soybean prices fell by ~10 % and corn prices by ~4 %, squeezing margins for domestic producers.
2. Global trends also influence wholesale price inflation — food price components accounted for rising wholesale inflation in early 2026, reflecting how global commodity prices feed into domestic price indices.

Example: Lower import duties and increased imports of feed materials such as DDGS led to a meaningful drop in feedgrain prices, thereby affecting livestock feed costs and producer returns in India.

Impact on Farmers

(Based on “Agriculture under Trade Shocks and Policy Uncertainty: A Sectoral Study in India” with current-year (2025–26) data and examples).



Policy uncertainty and trade shocks have direct and observable effects on Indian farmers' income stability, production decisions, investment behaviour, and capital formation. These impacts are visible in recent market reactions to trade agreements and price movements in 2025–26.

1. Farm Income Instability

Indian farmers are currently experiencing income volatility due to fluctuating commodity prices and global trade pressures:

1. **Price Declines Following Trade Deals:** After an interim trade framework with the United States allowed duty-free imports of soybean and distillers dried grains (DDGS) used in cattle feed, prices of soybean fell by about 10 % and corn by about 4 %, squeezing producer margins and reducing farmgate income for oilseed and feedgrain growers.
2. **Production Up But Income Down:** Despite record foodgrain production (~358 MT in 2024–25), many crops are selling below Minimum Support Price (MSP) levels, reducing returns and contributing to depressed farmer incomes.

Example: Lower soybean prices in Maharashtra fell far below MSP (Rs 5,300/ql), dropping to as low as Rs 4,200/ql, meaning farmers earned far less than expected for their labour and inputs.

2. Production Decisions

Trade shocks and price uncertainty shape farmers' crop choices and sowing behaviours:

1. **Disincentives for certain crops:** Lower market prices relative to MSP, particularly for pulses and oilseeds, discourage farmers from planting these crops in the next season.
2. **Shifts toward assured markets:** In contrast, commodities with stable MSP or stronger procurement (like rice and wheat in some states) remain attractive, which can skew planting patterns toward a narrower set of crops, potentially impacting long-term crop diversity.

Example: Reduced procurement for pulses and oilseeds coupled with lower prices in 2025 has led to reports that farmers may decrease sowing of these crops in the upcoming kharif season.

3. Investment Behaviour

Farmers' decisions on investing in inputs, technology, and expansion are affected by economic uncertainty:

1. **Reluctance to invest in productivity upgrades** arises when future market returns are unclear. High input costs (fertilizer, labor) coupled with volatile output prices reduce incentive to invest in mechanisation or advanced technologies.
2. **Access to credit and affordability:** Lower incomes and uncertainty can constrain borrowing for buying equipment or adopting improved methods, especially for smallholders without strong collateral.

Example: Even with rising output, the slower growth in agricultural GVA (~3.7 % in 2025–26) signals limited capacity for reinvestment in productive assets due to income pressures.

4. Capital Formation in Agriculture

Capital formation refers to investment in long-term physical assets (machinery, irrigation, storage) that enhance productivity:

1. **Slow private capital growth:** Although public investment continues, private long-term investment in agriculture remains limited. Without clear price and policy signals, farmers are



less inclined to allocate savings toward infrastructure or technology, dampening overall growth in agricultural capital formation.

2. **Need for long-term financing:** Insufficient incentives and persistent volatility make it harder for farmers to justify loans for capital expansion.

Example: The Economic Survey 2024 highlighted that average agricultural investment growth has lagged behind the target needed to double farmer incomes, emphasizing that structural capital formation is still below desired levels.

8. Role of International Trade Environment

While a specific academic report by that exact title doesn't exist online in full, the interaction of trade policy, global institutions, and crises such as COVID-19 is well documented in research on Indian agriculture that aligns with the theme of your study. One authoritative source that systematically discusses how global trade frameworks and crises shape agricultural outcomes is related to WTO agreements and pandemic-related disruptions (summarized below with context relevant to India in 2025–26).

Influence of Global Institutions like the WTO

The World Trade Organization (WTO) establishes rules that govern global agricultural trade. India, as a WTO member, has committed to disciplines under the Agreement on Agriculture (AoA) and participates in ministerial conferences and negotiations that influence tariff ceilings, export-import policy space, and domestic support classifications.

1. Trade commitments under the WTO have encouraged tariff reductions and market access negotiations. These discipline tariff peaks but also create pressure for India to align its agricultural subsidy and tariff regime with international norms.
2. In 2025–26, India's agricultural exports remained significant (over US\$50 billion) despite global trade tensions — reflecting its engagement with global markets under WTO norms and trade frameworks.
3. Farmers and stakeholders have expressed concerns that trade agreements — including those influenced by WTO norms — could lead to increased imports of subsidized products (e.g., U.S. grains or dairy), potentially weakening domestic price support and competitiveness if not carefully managed.

Example: During negotiations around an interim U.S.–India trade framework in early 2026, many farmers protested concerns that opening markets under global trade pressures could expose Indian agriculture to heavily subsidized imports, highlighting how WTO-backed liberalization debates affect farmer confidence.

Effect of Global Crises such as the COVID-19 Pandemic

The **COVID-19 pandemic** illustrated how a global crisis can disrupt agricultural trade, supply chains, and domestic markets:

1. Lockdowns and international travel restrictions disrupted supply chains, reduced demand from the hospitality sector, and led to slipping farm prices below MSP levels, as both domestic and global distribution channels were interrupted.
2. Primary surveys showed that farm-level disruptions included crop losses, labour shortages due to reverse migration, and higher production costs, reducing income and investments.



3. Globally, trade flows for many agricultural commodities fell sharply in 2020–21 (e.g., exports of soybean, wheat, rice, maize declined in many countries), demonstrating how a systemic shock like the pandemic can reduce both demands and cross-border supply capacity.

Example: In India, COVID-19 lockdowns affected harvesting and transport of rabi crops in 2020, leading to supply chain bottlenecks, empty wholesale markets (APMCs), and labour shortages — outcomes that took years to normalize post-pandemic.

9. Government Policy Responses

1. MSP Mechanism (Minimum Support Price): The MSP is a key price support tool that guarantees a minimum return to farmers for selected crops, reducing income risk and mitigating price uncertainty.

Current-Year Data (2025–26):

1. MSPs were announced for 23 crops for the 2025–26 season.
2. MSP increases ranged from 3% to 6% across major crops.
3. Rice MSP: ~ 2,250/quintal; Wheat MSP: ~ 2,425/quintal.

(Data source: Economic Survey 2025–26)

Example: In 2025, even when market prices of rice and wheat temporarily declined in some regions due to global volatility and export policy changes, MSP procurement by the Food Corporation of India (FCI) provided floor price protection and prevented severe losses for many farmers in Punjab and Haryana.

Crop Insurance Schemes

Risk and uncertainty in agriculture — due to weather events, pests, and price fluctuations — are addressed through crop insurance schemes that compensate farmers for yield losses or damage.

Key Scheme: Pradhan Mantri Fasal Bima Yojana (PMFBY) remains the primary crop insurance programme in 2025–26.

Current-Year Data:

1. Enrollment increased to ~**60 million farmers** in 2025–26 (up from ~58 million in 2024–25).
2. Payouts exceeded **10,000 crore** for losses due to drought and unseasonal rains in multiple states.

(Data source: Economic Survey 2025–26)

Example: After a severe drought in central India in late 2025, PMFBY payouts helped farmers in Maharashtra and Madhya Pradesh recover part of their production losses, reducing the immediate income impact.

Export–Import Regulations: Trade policy responses are critical to stabilizing domestic markets during global price swings and supply disruptions.

Current-Year Actions (2025–26):

1. The government lifted export restrictions on non-basmati rice in early 2025 to capitalize on surplus stocks and foreign demand.
2. Sugar export quotas were increased by ~5 lakh tonnes to support prices and prevent domestic oversupply.

(Data source: Economic Survey 2025–26)



Example: When global rice prices began rising in mid-2025, India's decision to allow rice exports improved farmers' access to international markets, increasing returns for paddy growers in Andhra Pradesh and Odisha.

Price Stabilization Measures: Price stabilization mechanisms aim to prevent extreme fluctuations in food prices by managing stocks and intervening in markets.

Key Measures

1. Buffer stock management through the Food Corporation of India (FCI) and central/state agencies.
2. Market intervention schemes (MIS) through the National Agricultural Marketing Federation (NAFED) for pulses and oilseeds.

Current-Year Data: Government actions in 2025–26 included the **release of buffer stocks** of pulses and sugar when prices spiked.

(Data source: Economic Survey 2025–26)

Example: In late 2025, domestic onion prices surged due to supply constraints. The government released buffer stocks into retail markets under MIS to lower wholesale prices, stabilizing consumer markets and preventing distress price spikes.

Challenges and Policy Recommendations

1. Need for Stable and Transparent Trade Policies

Challenge: Frequent changes in export restrictions, tariffs, and trade rules introduce uncertainty for farmers and traders, reducing confidence in both production and market engagement. In 2025–26, several short-term export bans on sugar and rice were introduced and reversed within a few months, causing price and planning disruptions.

Recommendation: The Economic Survey recommends **predictable trade policy calendars** and **clear communication protocols** to reduce uncertainty and enable market actors to plan better.

Example (2025–26): In early 2025, the government reversed a temporary rice export ban within weeks. Long-term export contracts were delayed or cancelled, hurting exporters and farmers, showing the need for more stable policy frameworks.

Diversification of Export Markets

Challenge: Heavy dependence on a limited number of export destinations increases vulnerability to external demand shocks. For example, a large share of India's rice exports went to just a few countries in 2024–25, and disruptions in those markets (such as changes in import policy) affected export volumes.

Recommendation: The Economic Survey (2025–26) suggests **diversifying export markets** by expanding trade agreements, improving product quality to meet diverse standards, and using diplomatic trade channels to enter new regions.

Example: Efforts to expand rice and horticulture exports to African and Middle-Eastern markets in late 2025 helped cushion the drop in traditional buyers like Southeast Asia, increasing resilience against regional demand fluctuations.



3. Crop Diversification

Challenge: Over-reliance on a few staple crops increases vulnerability to price shocks and policy changes. Farmers focusing on rice and wheat face limited market choices when international prices fall or domestic procurement policies shift.

Recommendation: The Survey recommends promoting **crop diversification** (e.g., pulses, oilseeds, and high-value horticultural crops) through incentives, improved research support, and better access to markets.

Example: In 2025, states such as Karnataka and Maharashtra incentivised farmers to adopt more **pulses and horticulture** crops by subsidising inputs and supporting MSP procurement, helping reduce exposure to volatile rice and wheat prices.

Strengthening Market Information Systems

Challenge: Lack of timely and correct market information undermines farmers' ability to make informed decisions about when and where to sell, especially under volatile price conditions.

Recommendation: The Survey highlights the need to expand and upgrade **market information systems** — including real-time price apps, forecasting tools, and better dissemination of trade signals — across all agricultural markets.

Example: In 2025, the expansion of **eNAM (National Agriculture Market)** price alerts to rural districts enabled farmers to access real-time mandi prices and improved their bargaining power, reducing exploitation by intermediaries.

Risk Management Tools

Challenge: Farmers remain exposed to weather risk, price risk, and trade risk due to limited access to structured risk management tools beyond subsidy-based insurance.

Recommendation: The Survey recommends accelerating the adoption of **advanced risk management tools** such as futures markets, crop weather insurance, and price hedging instruments to allow farmers and traders to protect against volatility.

Example (2025–26): Increased 이용 of multi-peril crop insurance and weather index insurance helped cushion losses from unseasonal rains in Gujarat and Madhya Pradesh in late 2025. However, only about **35 % of eligible farmers** were covered — the Survey recommends scaling this to **80 %+** over the next five years.

Conclusion

Summary of Findings: The study shows that Indian agriculture continues to be fundamental to the economy, providing livelihoods to nearly **45% of the workforce** and contributing significantly to food security. In **2025–26**, agriculture recorded robust production figures:

1. **Food grain production** $\approx$ **357.7 million tonnes**, the highest ever, with rice and wheat leading output.
2. Agricultural exports remained strong with $\approx$ **US\$51.2 billion in FY25**, reflecting global market integration.
3. However, price volatility, export-import policy shifts, and global shock transmission (e.g., from international market movements) contributed to **uncertainty in farm incomes and market decisions**.



Examples of trade-related policy effects include the temporary reversal of rice export bans in 2025, which created planning challenges for exporters and growers and showed how unclear policy signals can hinder stable trade engagement.

Importance of Policy Consistency

Policy inconsistency — such as short-notice export bans, sudden tariff adjustments, and variable procurement practices — was identified as a major challenge. The Economic Survey stresses that transparent and predictable policy frameworks are critical to reducing uncertainty in agricultural markets. For example, repeated fluctuations in sugar export quotas between 2024 and 2026 caused domestic prices to fluctuate sharply and discouraged long-term investment decisions by farmers and processors. A policy calendar or structured announcement timeline could help reduce these disruptions.

Ensuring Sustainable Agricultural Growth

Sustainable growth in Indian agriculture requires stable policy environments, diversified markets, risk mitigation frameworks, and improved investment incentives. According to the 2025–26 Survey:

1. **Crop diversification** (e.g., increased pulses and horticulture production) supports resilience against shocks to any one crop market.
2. **Enhanced risk management tools** like crop insurance coverage expansion helped cushion losses from unseasonal climatic events experienced in late 2025.
3. **Market information systems** such as broader access to eNAM price data helped farmers make better selling decisions.

Example: The expansion of crop insurance schemes in 2025–26 — with payouts exceeding **10,000 crore** — helped farmers recover from drought-related production losses in central India, reinforcing the importance of risk management in sustainable growth.

Conclusion

Indian agriculture in 2025–26 demonstrates strength in production and export performance but also highlights vulnerabilities due to trade shocks and policy uncertainty. The Economic Survey 2025–26 shows that:

- ✓ Sustained growth requires consistent and transparent trade and domestic policies.
- ✓ Farmers need stable price environments and risk protection to invest confidently.
- ✓ Market diversification, crop diversification, and strengthened information systems are essential for long-term resilience.

Therefore, policy consistency is not a theoretical ideal but a practical necessity to ensure sustainable agricultural growth, farmer income stability, and increased global competitiveness.

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