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## Post-WTO Dynamics in Indian Agriculture: Implications for Crop Diversification and Agri-Trade Competitiveness

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The inclusion of agriculture under the World Trade Organization (WTO) framework in 1995 marked a pivotal shift in global agricultural trade. For India, a predominantly agrarian economy with millions depending on farming, the WTO's Agreement on Agriculture (AoA) ushered in new opportunities and challenges. On one hand, market access expanded and export potential improved; on the other, Indian agriculture faced intensified competition, stringent standards and issues surrounding subsidies and trade distortions. This article examines post-WTO dynamics affecting Indian agriculture particularly export subsidy issues, Sanitary and Phytosanitary (SPS)/Technical Barriers to Trade (TBT) and trade distortions and discusses their implications for crop diversification and agri-trade competitiveness.

### Post-WTO Context of Indian Agriculture

Before the WTO, international agricultural trade was dominated by tariff barriers and bilateral agreements, with limited integration for developing countries. The WTO's AoA aimed to liberalize trade by reducing tariffs, disciplining subsidies and encouraging market access globally. Under this regime, Indian agriculture became more exposed to global price signals and competition from subsidized producers in developed nations. The AoA categorizes subsidies into "boxes" green (allowed), amber (limited) and blue (production-limiting support) each with specific commitments aimed at reducing trade-distorting practices. Though WTO membership offered new export possibilities for India, several structural and regulatory challenges in the global system have complicated the country's agricultural competitiveness.

### Export Subsidy Issues

#### Role and Limits of Export Subsidies

Export subsidies are government financial supports that make domestic products cheaper on the world market. Under WTO rules, export subsidies for agricultural products are discouraged and subject to reduction commitments because they distort international prices and trade flows in favour of subsidizing nations. Although the WTO has pushed for disciplining or eliminating such subsidies, they remain contentious, especially for developing countries seeking to support farmers' incomes and manage surplus stocks. For India, the export subsidy debate gained prominence in recent years as many developed countries continued to provide significant support to their agricultural sectors. For example, the United States has historically subsidized farmers with substantial financial transfers, which Indian stakeholders argue create an uneven global playing field. Reports indicate U.S. farmers

receive over USD 60,000 per farmer annually compared to India's relatively low subsidies, estimated at around USD 282 per farmer. This divergence allows subsidized producers to export at lower prices, making it difficult for Indian products to compete internationally.

### **Impact on Indian Farmers and Competitiveness**

Due to limited export support compared to developed countries, Indian farmers often face price disadvantages that reduce profit margins and competitiveness abroad. Where export subsidies exist, they tend to be selective and short-term, such as for sugar or cotton, leading to WTO disputes. For instance, India has faced international challenges and scrutiny over its subsidy levels particularly for rice allegedly exceeding WTO's "de minimis" limit of 10% of production value, resulting in diplomatic tension with countries like Thailand. These disputes highlight how subsidy debates can overshadow India's marketing efforts and strain diplomatic trade relations.

### **Effect on Crop Diversification**

Export subsidies in competitor countries distort relative prices, affecting Indian cropping decisions. When subsidized exports flood global markets with certain commodities like cotton or grains, international prices drop, reducing incentives for Indian farmers to shift to high-value crops. Without supportive domestic subsidies for horticulture and other diversified crops that have higher export potential, many farmers remain focused on staple crops supported by India's Minimum Support Price (MSP) regime even though such production offers limited gains in international competitiveness against subsidized global suppliers.

## **SPS and TBT Barriers**

### **Sanitary and Phytosanitary (SPS) Measures**

The SPS Agreement under the WTO allows countries to set their own standards to protect human, animal and plant health while ensuring that such measures are scientifically justified and non-discriminatory. SPS measures include pesticide residue limits, quarantine protocols and food safety tests. Although these protections are essential, they often function as non-tariff barriers for agricultural exporters, particularly from developing countries.

India's agricultural exports such as basmati rice, fruits, tea and spices have confronted stringent SPS requirements in markets like the EU and Japan. Instances of bans or rejections occur when shipments fail to meet pesticide residue limits or pest inspection criteria, leading to market access challenges and reputational risks for Indian exporters and processors.

### **Technical Barriers to Trade (TBT)**

TBTs refer to technical regulations, standards and conformity assessment procedures that impact trade. These include labelling requirements, packaging norms and quality standards that go beyond basic health risks. When TBTs are overly complex or vary substantially across markets, they increase production and compliance costs for exporters and can act as disguised protectionist tools that hinder market access.

### **Agricultural Infrastructure and Compliance**

Indian smallholder farmers often lack infrastructure for post-harvest handling, certification and traceability required to comply with SPS/TBT standards in export destinations. Meeting multiple standards simultaneously such as EU maximum residue limits (MRLs) and specific labelling requirements escalates costs and lengthens preparation times, putting Indian exporters at a disadvantage relative to competitors with better compliance capabilities.

### **Impact on Trade Patterns and Diversification**

SPS and TBT barriers shape Indian agricultural trade flows by incentivizing export of products that easily meet stringent standards while discouraging others. For instance, processed and value-added products with controlled quality may find easier access to stringent markets, thereby encouraging crop diversification toward horticulture, processed foods and organic produce. However, if domestic infrastructure fails to support compliance, diversification may remain constrained. Overcoming SPS/TBT challenges requires investment in cold chains, certification labs and farmer training in international standards.

## **Trade Distortions and Their Implications**

### **Global Subsidy Regimes and Price Distortions**

Trade distortions arise when domestic policies like subsidies, tariffs and price supports alter market outcomes relative to free markets. Developed countries often use “green box” policies ostensibly non-trade-distorting supports such as environmental payments to support farmers without violating WTO limits. However, Indian policymakers and analysts contend that such policies still indirectly enhance production and trade capacity in ways that distort competition. Critics argue that the interpretation of green box allowances often benefits wealthy agricultural exporters, allowing them to provide significant support while maintaining WTO compliance.

### **Tariff Structures and Import Competition**

India maintains relatively high agricultural tariffs to protect domestic producers. Average Most Favoured Nation (MFN) tariffs on agricultural products hover near 37%, with some items like rice facing tariffs up to 70%. While high tariffs shield domestic farmers from import competition, they also deter reciprocal tariff liberalization in trade negotiations, limiting export potential. For example, steep tariffs on edible oils and processed foods constrain foreign market access for India’s agricultural processors and may perpetuate low global integration.

High tariffs and protective barriers also influence cropping decisions, sometimes discouraging farmers from diversifying into crops that lack domestic protection but have export potential.

### **Export Restrictions and Market Credibility**

India has also employed export bans or restrictions on staple commodities like onions or rice during spikes in domestic prices to control inflation and protect local consumers. While these measures may stabilize local markets, they undermine India’s credibility in global markets, creating uncertainty for foreign buyers who may seek alternative suppliers. Such trade distortions can reduce long-term demand for Indian products and weaken export competitiveness.

### **Trade Distortions and Crop Diversification**

Distorted domestic pricing mechanisms and trade policies influence farmers’ cropping choices. Price volatility due to import competition, subsidies in competing countries or government interventions can discourage investment in specialized or high-value crops. Without consistent policies that link diversification to assured market access and risk management, farmers may default to traditional staples despite international demand for diversified products like pulses, oilseeds, fruits and vegetables.

## **Policy Implications for Crop Diversification and Competitiveness**

### **Strengthening Quality Infrastructure**

Addressing SPS/TBT barriers requires building domestic capacity for quality testing, certification and standard compliance. Investments in accredited laboratories, cold chain logistics, traceability systems and farmer education can help Indian exports meet international requirements more efficiently. Enhanced infrastructure not only improves export performance but also incentivizes production of high-value diversified crops that command premium prices globally.

### **Reconsidering Domestic Subsidies**

India’s MSP policy and allied subsidies have historically been oriented toward staples like rice and wheat, shaping cropping patterns. While MSP helps assure incomes for staple producers, aligning support mechanisms with diversification targets such as incentivizing pulses, horticulture and organic crops could encourage farmers to shift toward export-oriented production. Rebalancing domestic incentives with global competitiveness is critical to diversify cropping patterns in line with market demand.

### **Negotiating Trade Agreements with Agriculture Emphasis**

India's cautious approach to agriculture in free trade agreements (FTAs) has limited preferential market access for its agricultural exports. Including agriculture more proactively in FTAs can secure tariff reductions and predictable market access for diversified exports, encouraging farmers to produce crops with comparative advantages. Participation in regional value chains can also enhance competitiveness in key markets.

### **Addressing Global Trade Distortions**

India should actively engage in WTO negotiations focused on reducing distortions from subsidies and harmonizing SPS/TBT standards. Collaborative dialogues can push for equitable interpretations of support disciplines and foster internationally accepted benchmarks that consider capacity constraints faced by developing economies. Active participation can also prevent unilateral pressures that disadvantage India's policy space.

### **Conclusion**

Indian agriculture's engagement with the WTO has opened up global market opportunities but also exposed structural challenges related to export subsidies, SPS/TBT barriers and trade distortions. These dynamics significantly impact crop diversification and agri-trade competitiveness by shaping market access, price signals and farmers' incentives. To fully harness global opportunities, India must strengthen quality and compliance infrastructure, realign domestic support mechanisms toward diversification and competitiveness and strategically negotiate trade agreements that safeguard agricultural interests. Tackling SPS and TBT barriers through capacity building and harmonization of standards will further facilitate export growth and diversification. Only through coherent policy measures that balance protection with proactive engagement can Indian agriculture navigate post-WTO complexities and emerge more resilient and competitive in global agri-trade.

### **References**

1. Drishti IAS. (2025). *Challenges in India's Agricultural Exports (SPS/TBT, trade barriers)*.
2. Drishti IAS. (2025). *Unfair competition, subsidy issues and export bans in agriculture*.
3. Drishti IAS. (2025). *Thailand's concern over India's agricultural subsidy and WTO rules*.
4. Orfonline. (2025). *Tariffs and trade balance in Indian agriculture*.
5. Takshashila Institution. (2025). *India's Agricultural Trade: Policies and Prospects*.
6. WTO Agreement on Agriculture. (2025). *International treaty on agriculture and trade rules*.