World Trade Organisation and Agriculture: Trade Liberalisation, Persistent Protection and the Stalled Reform Agenda

Dr. A. Rasheethabanu[1], Dr. G. Rajini[2]

[1] Assistant Professor & Head, Department of Economics, C. Kandaswami Naidu College, Anna Nagar East, Chennai – 600 102, Tamil Nadu, India.

[2] Professor & Dean – Faculty, School of Management Studies, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Pallavaram, Chennai – 600 117, Tamil Nadu, India.

DOI: https://doi.org/10.51244/IJRSI.2026.1311000100

Received: 07 November 2026; Accepted: 12 November 2026; Published: 24 November 2026

ABSTRACT

In 1995, for the first time in the history of the World Trade Organization (WTO), agriculture entered multilateral discipline with the adoption of the Agreement on Agriculture, but it is still the most protected and most-contested sector of the WTO. The paper looks at the legal framework, the economic foundation and the negotiation processes of the agricultural regime in the WTO and will try to explain why the objective of the reform as set out in Article 20 of the AoA has not been realised. The paper, with a qualitative, literature-based and doctrinal approach that only refers to published WTO decisions, WTO reports and the academic literature only, takes the three pillars of the AoA (market access, domestic support and export competition), the unanswered question of public stockholding for food security and the position of developing countries. It claims that three structural features account for the deadlock: a large gap between "bound" and "applied" tariffs, thus building policy space, but also destroying the credibility of the markets; a fixed external reference price and so food-security procurement becomes a legal matter; and shifting coalitions of negotiators, as in the 13th (2022) and 14th (2024) Ministerial Conferences, which lacked any agricultural outcome. The paper concludes with a conceptual agenda for the reform of the public stockholding, the market access problem, bound-tariff overhang, tariff-rate quota administration and export restrictions, and a transition out of more distortive instruments to support.

Keywords: World Trade Organization, agriculture , stockholding , food security

1. INTRODUCTION

Agriculture was the last major sector to be brought inside the multilateral trading system. For nearly half a century after the General Agreement on Tariffs and Trade (GATT) was signed in 1947, farm trade was treated as an exception, shielded by quotas, variable levies, export subsidies and domestic price supports that were justified by food security and rural livelihoods (Josling et al., 1996; Hoekman & Kostecki, 2009). The first GATT round cut weighted average tariffs by about 26%, but it focused on non-agricultural goods (Bown & Irwin, 2016). The Uruguay Round changed this. The Agreement on Agriculture, which entered into force with the WTO on 1 January 1995, converted non-tariff barriers into bound tariffs, created tariff-rate quotas (TRQs) to guarantee minimum access, capped trade-distorting domestic support and began to discipline export subsidies (World Trade Organization [WTO], 1995). Article 20 committed members to continue the reform process.

Three decades later the picture is mixed. Agricultural trade has grown, new exporters have emerged, and export subsidies have been scheduled for elimination (WTO, 2015). Yet the sector still stands apart. Agricultural tariffs remain markedly higher than tariffs on manufactures (Gibson et al., 2001; Farris & Morgan, 2026), producer support in many economies still relies on instruments that distort prices (Organisation for Economic Co-operation and Development [OECD], 2025), and the negotiating track that began with the Doha Development

Agenda has delivered only partial outcomes. The Thirteenth Ministerial Conference (MC13) in Abu Dhabi ended without an agreement on agriculture, with public stockholding for food security the main obstacle (European Commission, 2024; Institute for Agriculture and Trade Policy [IATP], 2024), and the Fourteenth (MC14) in Yaoundé in March 2026 again closed without a multilateral agricultural outcome (Third World Network, 2026a).

This paper reviews that record from a legal-economic perspective. It addresses three research questions. RQ1: what does the WTO agricultural regime require of members, and what has it achieved since 1995? RQ2: why do protection and trade-distorting support persist, and why have the negotiations stalled? RQ3: which reforms are most likely to unlock progress? The contribution is threefold. The paper integrates the economic theory of agricultural protection with the legal framework of the AoA, outlines the actual mechanisms (bound-tariff overhang, fixed reference price, shifting coalitions) that can lead to deadlock and connects the mechanisms to a specific reform agenda, complete with a sequence of events.

The paper is organised as follows. The theoretical and empirical literature is reviewed in Section 2. The institutional structure of the AoA is summarised in Section 3, as is the chronology of the negotiations. The methodology is described in section 4. Section 5 provides an examination of the regime, pillar by pillar. Section 6 examines the implications of this, Section 7 proposes policy recommendations, Section 8 presents limitations and future research, and Section 9 concludes.

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Why agriculture is protected

Two strands of theory explain why governments protect agriculture and why they need an international agreement to restrain themselves. The terms-of-trade approach holds that large countries can improve their terms of trade by taxing imports, which invites retaliation and leaves everyone worse off; trade agreements are a device to escape this prisoner's dilemma (Johnson, 1953; Bagwell & Staiger, 1999, 2002). The political-economy approach emphasises that concentrated farm interests organise more effectively than dispersed consumers and taxpayers, so governments weigh producer welfare heavily when setting policy (Grossman & Helpman, 1994). Anderson et al. (2013) document a regular pattern: as economies develop, policy shifts from taxing agriculture to protecting it. Swinnen (2009) traces the rise of agricultural protection in Europe across two centuries, and Krueger et al. (1988) and Anderson (2009) show that many developing countries historically taxed their farmers, directly through marketing boards and indirectly through exchange-rate and industrial policies.

The historical exclusion of agriculture from GATT disciplines is explained in the same terms. Farm programmes in the United States and Europe were built on price supports and import restrictions that were incompatible with tariff-only bargaining, and exceptions were written into the GATT text and later widened by waivers (Josling et al., 1996; Irwin, 1996). The result, by the time of the Uruguay Round, was a sector with high and opaque protection, large export subsidies and recurrent trade conflict. Josling et al. (2010) survey a century of analysis of these questions by agricultural economists.

2.2 The Agreement on Agriculture and its evaluation

Evaluations of the AoA agree that it was an important first step but a modest one. Ingco and Nash (2004) and Orden et al. (2011) show that tariffication left bound tariffs well above applied rates and that domestic-support limits constrained few members in practice. Wainio et al. (2001) report that the Uruguay Round required developed countries to cut agricultural tariffs by an average of 36% (minimum 15% per line) and developing countries by 24% (minimum 10%), but averaging allowed deep cuts on low-tariff lines and shallow cuts on sensitive ones. Gibson et al. (2001) document the resulting tariff profiles, including the widespread use of TRQs and specific duties. More recent work finds that the administration of TRQs can itself be a form of protection (Beckman et al., 2021; Schaefer & Wolf, 2025).

2.3 Controlling the costs of reform

The literature on a computable general equilibrium (CGE) model estimates that most of the welfare benefits of agricultural liberalisation come from agricultural protection, which is typically higher than in other sectors (Anderson & Martin, 2006; Anderson et al., 2006; Hertel & Keeney, 2006). For developing economies, the issue is not only that tariffs are more important than subsidies as a form of market access constraint, as found by Hoekman et al. (2004), but also that there is no recent data discussing the relative importance of global agricultural subsidies and tariffs. For developing economies, not only is tariff important as a market access constraint compared to subsidies, as found by Hoekman et al. (2004), but there is also no recent data discussing the relative importance of global agricultural subsidies and tariffs. According to Beckman (2021), the removal of all agricultural tariffs will increase the value of global trade by approximately 11%. The poverty implications have been debated: Winters et al. (2004) show that the impact of trade liberalisation on poverty is context-specific and hinges on the nature of its implementation to the household and Hertel and Winters (2006) trace the different impacts of the Doha agenda on the poor. The emblematic case was cotton, where world prices paid by rich countries are depressed by their subsidies for producers. (Sumner, 2006)

2.4 WTO membership, trade and food security

The question of whether or not WTO membership leads to more trade is itself a subject of debate. Rose (2004) does not detect much of a general membership effect while Tomz et al. (2007) demonstrate that the treatment of non-members and informal members is sensitive to the result, and Subramanian and Wei (2007) conclude that the WTO fosters trade strongly, but unevenly, benefiting sectors where exceptions remain. The literature also focuses on food security, since the 2007-08 price increase. Martin and Anderson (2012) and Bouët and Laborde (2012) demonstrate how export restrictions by the exporting country that seek to shield domestic prices will exacerbate world price booms, and Tangermann (2011) and Brooks and Matthews (2015) consider how trade rules can be made compatible with import dependence and price volatility. Non-tariff measures, especially sanitary and phytosanitary measures, are an additional layer of complexity (Josling et al., 2004). Much of the discussion on public-stockholding in India has been on the interaction between procurement and minimum support prices and WTO limits, which has been done by Gulati and Kelley (1999) and Gulati and Narayanan (2003).

2.5 Conceptual framework

Combining these strands, the paper adopts a three-part lens. First, protection is a political-economy outcome sustained by concentrated producer interests and by food-security and rural-livelihood objectives. Second, international rules matter because they define how much policy space governments retain, and the form of that space (high bound tariffs, fixed reference prices, flexible support categories) shapes negotiating incentives. Third, the negotiations are a bargaining game among coalitions of exporters, import-sensitive members and developing countries with food-security concerns, and an outcome requires that the concerns of all three can be accommodated in a single package.

3. INSTITUTIONAL BACKGROUND: THE WTO AGRICULTURAL REGIME

The AoA rests on three pillars. Under market access, non-tariff barriers were converted into ordinary tariffs and bound, with TRQs creating minimum-access opportunities. Under domestic support, policies are classified by their trade impact. Amber-box measures, chiefly market price support and input or output subsidies, are limited through the Aggregate Measurement of Support (AMS), subject to de minimis allowances of 5% of the value of production for developed countries and 10% for developing countries. Blue-box payments linked to production-limiting programmes and green-box measures with minimal trade distortion, such as research, infrastructure and decoupled income support, are exempt from limits. Under export competition, members committed to reduce subsidised quantities and budgetary outlays (WTO, 1995).

A distinctive and contentious feature is that the AMS for market price support is calculated against a fixed external reference price based on 1986–88. Because this reference price is never adjusted for inflation,

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue XI November 2026

procurement at administered prices can breach the de minimis limit arithmetically even when real support is modest, a problem that has become acute for developing countries that procure grain for food security (IATP, 2024; IISD, 2024). This explains why public stockholding has moved from a technical detail to the central issue in the agricultural negotiations.

Table 1. *Chronology of key WTO decisions on agriculture*

Year	Decision or event
1995	AoA enters into force with the WTO; tariffication, TRQs, AoA domestic-support and export-subsidy commitments (WTO, 1995)
2001	Doha Development Agenda launched, with agriculture as a central negotiating pillar
2013	Bali ministerial decision on public stockholding: interim "peace clause" shielding developing countries from legal challenge for breaching de minimis limits, subject to transparency conditions (WTO, 2013)
2015	Nairobi decision on export competition: elimination of scheduled agricultural export subsidies, immediately for developed members and later for developing members (WTO, 2015)
2024	MC13, Abu Dhabi: no agreement on agriculture; no permanent solution on public stockholding (European Commission, 2024)
2026	MC14, Yaoundé: no multilateral outcome on agriculture (Third World Network, 2026a)

*Note.*This is a compilation of the author from the decisions made by the WTO and secondary reports.

The Bali interim solution agreed in 2013 and later opened up has been protecting but not solving the problem (WTO, 2013). The Nairobi export competition decision was a real success as it eliminated one of the most obviously distorting measures (WTO, 2015). But there was no further agreement on the remaining pillars. The Bali solution was not taken up in other countries' programmes of least developed countries, nor was a long-term solution for public stockholding found at MC13, and at MC14, it was reported that this trend continued (IISD, 2024; Third World Network, 2026a).

4. METHODOLOGY

The study is a qualitative, literature-based and doctrinal review. It does not collect primary data, and it does not undertake statistical or econometric analysis. The evidence base consists of three types of published material: legal and decision texts of the WTO (the Uruguay Round agreements and the Bali and Nairobi ministerial decisions); official reports and statistical publications by international and national agencies, in particular the WTO, the International Trade Centre, UNCTAD, the OECD and the United States Department of Agriculture; and peer-reviewed and policy literature on agricultural trade policy. Facts and figures are reported descriptively, with their sources, and are not re-estimated. Developments after 2013 are drawn from official statements and from reputable reporting on the ministerial conferences and are identified as such where they have not yet been the subject of academic assessment.

A review is carried out in three phases. The provisions of the AoA and any other subsequent ministerial decisions are summarized first. Second, the literature is consulted to interpret the effect of each provision on the incentives. Third, the remaining issues are notated on the negotiating record, in order to examine the "how" and "what" of the deadlock and to arrive at a set of options for reform.

5. AGRICULTURAL REGIME IN THE WTO: PILLARWISE ANALYSIS

5.1 Market access: tariffication, bound rates and tariff-rate quotas

The market-access pillar replaced quantitative restrictions and variable levies with ordinary tariffs and set their levels. The Uruguay Round formula called for average cuts of 36% (at least 15% on each tariff line) in agriculture tariffs for developed countries and 24% (at least 10%) for developing countries (Wainio et al., 2001). Because the commitments were averages, members could cut deeply on lines where tariffs were already low and shallowly on sensitive products, and the initial bound rates were often set well above the rates applied (Ingco & Nash, 2004). Tariff-rate quotas were introduced to guarantee minimum import access, but their effect depends on how quotas are allocated and administered and on the level of the over-quota duty (Beckman et al., 2021; Schaefer & Wolf, 2025).

The result is that agricultural tariffs are still higher than tariffs and the main restriction on policy is the difference between the set limits and the actual rates used. The USDA analysis of the 2025 WTO tariff profiles reports that the global simple-average applied MFN tariff is 13.4% for agricultural goods against 7.2% for non-agricultural goods, and that final bound agricultural tariffs average 47.0% (Farris & Morgan, 2026; WTO et al., 2025). Applied rates can therefore be raised substantially without breaching commitments. The case of shelled almonds in Turkey, where the applied rate was increased from 2% to 15% in 2023 under a bound rate of 43.2%, illustrates this flexibility (Beckman et al., 2025). The same source shows that the highest average agricultural tariffs among the G20 are found in a small number of economies, among them South Korea, India and Turkey, and that preferential agreements such as free-trade areas reduce the relevance of MFN rates for exporters that benefit from them (Farris & Morgan, 2026). Estimates in the literature suggest that the gains from removing agricultural tariffs would be considerable (Beckman, 2021; Hertel & Keeney, 2006), which is why market access has been the focus of exporting countries.

5.2 Domestic support: boxes, de minimis and the reference-price problem

The domestic-support pillar classifies policies by their effect on trade. Amber-box support is capped through the Aggregate Measurement of Support, subject to de minimis allowances, while blue-box and green-box measures are exempt (WTO, 1995). The OECD reports that, although the overall intensity of support has declined over time, the share of market price support and other potentially most distorting forms of support in positive producer support has fallen by only five percentage points over two decades, to 66% in 2022–24 (OECD, 2025). This slow change in the way things are set up is why changing subsidies is still being discussed. It also matches the argument from economy that governments like tools that clearly help farming groups (Anderson et al. 2013; Grossman & help man 1994).

The rules also have a problem. Support for market prices is based on a reference price from 1986–88. Since this price has never been changed it is possible for government purchases at set prices to go over the limit by calculation even when the real support is not very high (IATP, 2024; IISD, 2024). Developed and developing countries are affected in ways because developed countries have big amounts of support allowed while many developing countries are limited by the small limit. Cotton is the example that shows this problem still exists because the support from producers affects the prices that African sellers get (Sumner, 2006).

5.3 Export competition

Export competition is the area where changes have worked the best. The December 2015 meeting in Nairobi decided that members would stop using scheduled agricultural export subsidies. This happened away for developed countries and over time for developing countries. They also agreed to control types of export support

(WTO, 2015). This took away the obvious way that markets were being distorted. The remaining issues are about export limits, which are not well controlled even though they can cause price jumps and hurt countries that need to import food (Martin & Anderson 2012; Bouët & Laborde 2012; Brooks & Matthews 2015).

5.4 Stockholding and food security

Public stockholding, for food security is the main topic that has shaped the discussions. The AoA recognises food security in its preamble and treats stockholding as green box when the stocks are acquired at market prices, but programmes that purchase at administered prices count towards the AMS. Members of the G33 group of developing countries, led by India, argued that this classification restricts legitimate food-security policy. The Bali decision of 2013 introduced an interim peace clause that shields developing countries from legal challenge for breaching their de minimis limits, subject to transparency and anti-circumvention conditions (WTO, 2013). The clause was later made open-ended, and it protects policy space, but it is not a permanent solution, and it does not extend automatically to new programmes. India's domestic procurement and price-support system has been a particular focus of the debate (Gulati & Kelley, 1999; Gulati & Narayanan, 2003). Exporters, for their part, express concern that open-ended stockholding at administered prices could depress world prices or give rise to subsidised exports (European Commission, 2024).

5.5 Development, poverty and special and differential treatment

The AoA grants developing countries longer implementation periods, lower reduction commitments and higher de minimis allowances, in recognition of the role of agriculture in employment and rural livelihoods (WTO, 1995). The development case for agricultural reform is nevertheless ambiguous. Liberalisation by rich countries can raise prices for exporters in developing countries, but it can also raise food import bills for net food importers, and the poverty effects depend on who in each country is a net producer or consumer (Winters et al., 2004; Hertel & Winters, 2006). This ambiguity explains why developing countries are divided, with exporters aligned with the Cairns Group and import-sensitive members with the G33, and why a package that satisfies one group may not satisfy the other.

5.6 The ministerial conferences of 2024 and 2026

The ministerial conferences of 2024 and 2026 did not reach an agreement on agriculture. At MC13 held in Abu Dhabi in February and March 2024 ministers could not agree on an outcome. The European Commission cited divergences and in particular the question of a permanent solution on public stockholding (European Commission 2024) and analysts noted that the draft text had also failed to extend the Bali interim solution to the new programmes of least developed countries and to deliver outcomes on cotton and on export-restriction exemptions (IISD, 2024). MC14 in Yaoundé in March 2026 again closed without an outcome on agriculture (Third World Network, 2026a). Reporting from the conference suggests that the United States favoured a procedural than a substantive outcome (Third World Network, 2026b). Two successive ministerial failures indicate that the difficulty is structural not tactical.

6. DISCUSSION

Reviews suggests that three structural mechanisms keep the negotiations in stalemate. The first is the bound-tariff overhang. When applied rates are below bound rates mutual reductions in bound rates yield little real market access so exporters demand cuts in bound rates while importers resist because that would remove policy space importers value. Because both positions are rational modest formula cuts cannot settle the issue an impasse that's consistent with the terms-of-trade logic of Bagwell and Staiger (1999) when members place a high value on flexibility.

Fixed reference price converts stockholding from an economic question into a legal one since compliance depends on a base-period price that is more than three decades old. Developing countries with procurement programmes argue that the AMS rules penalise food-security policies while exporters worry about spillovers to world markets (European Commission, 2024; IATP, 2024). The interim peace clause protects policy space.

Also removes pressure to settle the rules, which helps to explain why the issue has remained open since 2013 (WTO, 2013).

The third is the changing negotiating map. The traditional alignment, in which exporters seeking disciplines faced developing countries seeking flexibility has become less clear as the positions of members have shifted (Third World Network, 2026b). Preferential trade agreements further erode the relevance of MFN commitments for exporters that have access while exporters lacking preferential access face a disadvantage that MFN analysis cannot capture (Farris & Morgan 2026). These developments favour differentiated and possibly plurilateral approaches over a single undertaking.

Finally the review qualifies the debate on whether WTO membership works. Studies that average across sectors may understate the sector-specific gap because agriculture is the area in which exceptions persisted (Rose, 2004; Subramanian & Wei 2007; Tomz et al. 2007). What the record shows is not that the WTO has failed in agriculture but that the WTO has locked in a high-protection equilibrium with flexibility and that the political cost of moving to a lower-protection equilibrium has risen.

7. POLICY IMPLICATIONS

Five recommendations follow ordered from the most to the tractable.

First separate the public-stockholding problem from the market-access problem. An agreed fix to the reference price for example by indexing the external reference price for inflation or by using a notional price that reflects current world prices, combined with transparency and anti-circumvention requirements would convert the interim peace clause into a durable rule and remove the largest single obstacle (IATP, 2024; IISD, 2024; WTO, 2013).

Second narrow the overhang. Then seeking large cuts in applied rates, which are politically costly members could agree to cap bound rates at some margin above applied rates, which would increase predictability for exporters without forcing immediate liberalisation. Because bound agricultural tariffs sit above applied rates (Farris & Morgan 2026) this is the most efficient route to greater market access credibility.

Third discipline TRQ. Specific duties. Where TRQs are the binding constraint, allocation methods, fill rates and over quota duties determine access and transparent administration can deliver gains without tariff cuts (Beckman et al. 2021; Schaefer & Wolf 2025).

Fourth strengthen disciplines on export restrictions for food importing developing countries and humanitarian purchases. Export bans and taxes amplify price spikes (Martin & Anderson 2012; Bouët & Laborde 2012) and the pillar on export competition largely free of subsidies, after Nairobi is the logical place to extend disciplines (Brooks & Matthews 2015; Tangermann, 2011).

Fifth we should move from market price support to support that is not tied to prices and to invest in goods. The OECD finding that the distorting forms of support have fallen only slowly shows that the repurposing of support has been the weakest part of the reform (OECD, 2025). Cotton, the issue for the least developed countries remains the test case for whether the system can deliver development friendly outcomes (Sumner, 2006).

8. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The study is a qualitative review and does not give new empirical estimates. Its claims about the effects of tariffs and support rely on published studies and official reports and the account of MC14 relies on statements and reporting because academic assessment has not yet appeared. Future research could test the arguments with numbers for example by analysing panels of tariff-profile data to measure how long the agricultural tariff premium lasts and how bound overhang affects applied-tariff volatility; by analysing members' AMS notifications to measure how well members follow de minimis limits under reference-price rules; by estimating gravity models of agricultural trade that include preferential-access variables; and, by using computable general

equilibrium simulations to compare the welfare effects of overhang-capping, stockholding reform and export-restriction disciplines.

9. CONCLUSION

The WTO has brought agriculture inside the rules-based trading system, eliminated agricultural export subsidies in principle and made tariffs more transparent, but three decades after the AoA entered into force the sector remains the most protected in world trade. This paper has argued that the stalemate is explained by three structural features: bound tariffs that leave large policy space, a fixed reference price that makes food-security stockholding a legal problem, and a negotiating map in which the traditional coalitions no longer produce a package. The failure of two successive ministerial conferences in 2024 and 2026 to deliver an agricultural outcome is consistent with that diagnosis. Progress is most likely if negotiators separate the technical problem of public stockholding from the political problem of market access, address bound overhang and TRQ administration directly, extend disciplines on export restrictions, and encourage a shift in support towards less distorting instruments. Without such steps, the Article 20 reform mandate will remain unfinished.

REFERENCES

1. Anderson, K. (Ed.). (2009). *Distortions to agricultural incentives: A global perspective, 1955–2007*. Palgrave Macmillan and World Bank.
2. Anderson, K., & Martin, W. (Eds.). (2006). *Agricultural trade reform and the Doha Development Agenda*. Palgrave Macmillan and World Bank.
3. Anderson, K., Corong, E., Strutt, A., & Valenzuela, E. (2023). The relative importance of global agricultural subsidies and tariffs, revisited. *World Trade Review, 22*(3–4), 382–394.
4. Anderson, K., Martin, W., & van der Mensbrugghe, D. (2006). Market and welfare implications of Doha reform scenarios. In K. Anderson & W. Martin (Eds.), *Agricultural trade reform and the Doha Development Agenda* (pp. 333–399). Palgrave Macmillan and World Bank.
5. Anderson, K., Rausser, G., & Swinnen, J. (2013). Political economy of public policies: Insights from distortions to agricultural and food markets. *Journal of Economic Literature, 51*(2), 423–477.
6. Bagwell, K., & Staiger, R. W. (1999). An economic theory of GATT. *American Economic Review, 89*(1), 215–248.
7. Bagwell, K., & Staiger, R. W. (2002). *The economics of the world trading system*. MIT Press.
8. Beckman, J. (2021). *Reforming market access in agricultural trade: Tariff removal and the trade facilitation agreement* (Report No. ERR-280). U.S. Department of Agriculture, Economic Research Service.
9. Beckman, J., Gale, F., & Lee, T. (2021). *Agricultural market access under tariff-rate quotas* (Report No. ERR-279). U.S. Department of Agriculture, Economic Research Service.
10. Beckman, J., Jarrell, P., & Morgan, S. (2025). *Increasing tariffs on almond and walnut exports to Turkey* (Report No. EB-39). U.S. Department of Agriculture, Economic Research Service.
11. Bouët, A., & Laborde, D. (2012). Food crisis and export taxation: The cost of non-cooperative trade policies. *Review of World Economics, 148*(1), 209–233.
12. Bown, C. P., & Irwin, D. A. (2016). *The GATT's starting point: Tariff levels circa 1947* (Policy Research Working Paper No. 7649). World Bank.
13. Brooks, J., & Matthews, A. (2015). *Trade dimensions of food security* (OECD Food, Agriculture and Fisheries Papers No. 77). OECD Publishing.
14. European Commission, Directorate-General for Agriculture and Rural Development. (2024, March 2). *WTO MC13: No agreement on agriculture*. https://agriculture.ec.europa.eu/media/news/wto-mc13-no-agreement-agriculture-2024-03-02_en
15. Farris, J., & Morgan, S. (2026). *Most favored nation tariffs and U.S. agricultural trade* (Economic Information Bulletin No. 309). U.S. Department of Agriculture, Economic Research Service. https://www.ers.usda.gov/media/29580/eib-309.pdf
16. Gibson, P., Wainio, J., Whitley, D., & Bohman, M. (2001). *Profiles of tariffs in global agricultural markets* (Agricultural Economic Report No. 796). U.S. Department of Agriculture, Economic Research Service.

17. Grossman, G. M., & Helpman, E. (1994). Protection for sale. *American Economic Review, 84*(4), 833–850.
18. Gulati, A., & Kelley, T. (1999). *Trade liberalization and Indian agriculture*. Oxford University Press.
19. Gulati, A., & Narayanan, S. (2003). *The subsidy syndrome in Indian agriculture*. Oxford University Press.
20. Hertel, T. W., & Keeney, R. (2006). What is at stake: The relative importance of import barriers, export subsidies, and domestic support. In K. Anderson & W. Martin (Eds.), *Agricultural trade reform and the Doha Development Agenda* (pp. 37–62). Palgrave Macmillan and World Bank.
21. Hertel, T. W., & Winters, L. A. (Eds.). (2006). *Poverty and the WTO: Impacts of the Doha Development Agenda*. Palgrave Macmillan and World Bank.
22. Hoekman, B., & Kostecki, M. (2009). *The political economy of the world trading system* (3rd ed.). Oxford University Press.
23. Hoekman, B., Ng, F., & Olarreaga, M. (2004). Agricultural tariffs or subsidies: Which are more important for developing economies? *World Bank Economic Review, 18*(2), 175–204.
24. Ingco, M. D., & Nash, J. D. (Eds.). (2004). *Agriculture and the WTO: Creating a trading system for development*. World Bank and Oxford University Press.
25. Institute for Agriculture and Trade Policy. (2024). *Public stocks at the WTO: Making sense of food security and agriculture negotiations at MC13*. https://www.iatp.org/sites/default/files/2024-02/2024_public_stockholding_3_final.pdf
26. International Institute for Sustainable Development. (2024). *IISD experts on MC13 outcomes*. https://www.iisd.org/articles/news/iisd-experts-mc13-outcomes
27. Irwin, D. A. (1996). *Against the tide: An intellectual history of free trade*. Princeton University Press.
28. Johnson, H. G. (1953). Optimum tariffs and retaliation. *Review of Economic Studies, 21*(2), 142–153.
29. Josling, T. E., Tangermann, S., & Warley, T. K. (1996). *Agriculture in the GATT*. Macmillan.
30. Josling, T., Anderson, K., Schmitz, A., & Tangermann, S. (2010). Understanding international trade in agricultural products: One hundred years of contributions by agricultural economists. *American Journal of Agricultural Economics, 92*(2), 424–446.
31. Josling, T., Roberts, D., & Orden, D. (2004). *Food regulation and trade: Toward a safe and open global system*. Institute for International Economics.
32. Krueger, A. O., Schiff, M., & Valdés, A. (1988). Agricultural incentives in developing countries: Measuring the effect of sectoral and economy-wide policies. *World Bank Economic Review, 2*(3), 255–271.
33. Martin, W., & Anderson, K. (2012). Export restrictions and price insulation during commodity price booms. *American Journal of Agricultural Economics, 94*(2), 422–427.
34. Orden, D., Blandford, D., & Josling, T. (Eds.). (2011). *WTO disciplines on agricultural support: Seeking a fair basis for trade*. Cambridge University Press.
35. Organisation for Economic Co-operation and Development. (2025). *Agricultural policy monitoring and evaluation 2025*. OECD Publishing. https://www.oecd.org/en/publications/agricultural-policy-monitoring-and-evaluation-2025_a80ac398-en.html
36. Rose, A. K. (2004). Do we really know that the WTO increases trade? *American Economic Review, 94*(1), 98–114.
37. Schaefer, K. A., & Wolf, C. A. (2025). Trade protection via tariff rate quota administration. *Food Policy, 131*, Article 102801.
38. Subramanian, A., & Wei, S.-J. (2007). The WTO promotes trade, strongly but unevenly. *Journal of International Economics, 72*(1), 151–175.
39. Sumner, D. A. (2006). Reducing cotton subsidies: The DDA cotton initiative. In K. Anderson & W. Martin (Eds.), *Agricultural trade reform and the Doha Development Agenda* (pp. 271–292). Palgrave Macmillan and World Bank.
40. Swinnen, J. F. M. (2009). The growth of agricultural protection in Europe in the 19th and 20th centuries. *The World Economy, 32*(11), 1499–1537.
41. Tangermann, S. (2011). *Policy solutions to agricultural market volatility: A synthesis* (ICTSD Issue Paper No. 33). International Centre for Trade and Sustainable Development.
42. Third World Network. (2026a, March 31). Trade: MC14 ends with no outcomes on key issues; IFDA bid blocked. *TWN Info Service on WTO and Trade Issues* (Mar26/47). https://twn.my/title2/wto.info/2026/ti260347.htm

43. Third World Network. (2026b, March 30). MC14 collapses as U.S. strategy derails Yaoundé negotiations. *TWN Info Service on WTO and Trade Issues* (Mar26/43). https://twn.my/title2/wto.info/2026/ti260343.htm
44. Tomz, M., Goldstein, J. L., & Rivers, D. (2007). Do we really know that the WTO increases trade? Comment. *American Economic Review, 97*(5), 2005–2018.
45. Wainio, J., Gibson, P., & Whitley, D. (2001). Options for reducing agricultural tariffs. In M. E. Burfisher (Ed.), *Agricultural policy reform in the WTO—The road ahead* (Agricultural Economic Report No. 802, pp. 43–57). U.S. Department of Agriculture, Economic Research Service.
46. Winters, L. A., McCulloch, N., & McKay, A. (2004). Trade liberalization and poverty: The evidence so far. *Journal of Economic Literature, 42*(1), 72–115.
47. World Trade Organization, International Trade Centre, & United Nations Conference on Trade and Development. (2025). *World tariff profiles 2025*. WTO.
48. World Trade Organization. (1995). *The results of the Uruguay Round of multilateral trade negotiations: The legal texts*. WTO.
49. World Trade Organization. (2013). *Public stockholding for food security purposes: Ministerial decision of 7 December 2013* (WT/MIN(13)/38; WT/L/913). WTO.
50. World Trade Organization. (2015). *Export competition: Ministerial decision of 19 December 2015* (WT/MIN(15)/45; WT/L/980). WTO.