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The Regulation of Bottled Water Export and Import in Indonesia: A Legal Comparison with WTO Principles

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Abstract:
Indonesia's policy of restricting the export of domestically produced mineral water while permitting imports of foreign brands reflects the tension between national resource sovereignty, economic liberalization, and international trade commitments. This study examines Indonesia's administrative legal framework governing bottled water trade through the lens of World Trade Organization (WTO) principles. Employing a normative legal research methodology with comparative analysis, this research analyzes Indonesia's regulatory instruments, including Law No. 7 of 2014 on Trade, Law No. 17 of 2019 on Water Resources, and ministerial regulations, comparing them against GATT 1994 Articles I, III, XI, and Article XX(g) exceptions. The findings reveal that Indonesia's multi-layered permitting system, resource-based restrictions, and de facto domestic market obligations create significant barriers to export competitiveness while potentially violating WTO non-discrimination principles. However, Indonesia may invoke Article XX(g) environmental exceptions if export restrictions are transparently linked to groundwater conservation and applied consistently to domestic production. This study recommends regulatory harmonization, transparent licensing procedures, mutual recognition agreements, and coordination between administrative and environmental policies to balance constitutional mandates with international trade obligations.

Keywords: *Bottled water regulation; WTO principles; GATT 1994; administrative law; export restrictions.*

INTRODUCTION

Indonesia, as an archipelagic nation endowed with abundant freshwater resources, hosts one of Southeast Asia's largest bottled water markets. Alongside rapid population growth, urbanization, and rising health awareness, global demand for bottled mineral water continues to expand. However, this growing economic opportunity creates a regulatory dilemma between promoting export-led growth and fulfilling the state's constitutional duty to ensure equitable access to water for its citizens.

According to Hadipuro (2010), Indonesia's water governance often struggles to balance commercialization and public service, revealing tension between state control and private exploitation. Thus, a robust administrative framework is essential to harmonize economic exploitation, environmental sustainability, and social welfare principles, as mandated by Article 33 of the 1945 Constitution. In this regard, Indonesia's trade and environmental policies collectively form a legal regime designed to regulate export–import activities, maintain domestic supply security, and ensure that the utilization of water resources serves the public interest (Masnun et al., 2024).

Nationally, bottled water export and import regulation in Indonesia operates under an integrated legal framework that spans trade, environmental, and natural resource law (The 1945

Constitution of the Republic of Indonesia, 1945; Law Number 18 of 2012 Concerning Food, 2012; Law Number 7 of 2014 Concerning Trade, 2014; Law Number 17 of 2019 Concerning Water Resources, 2019; Minister of Industry Regulation Number 47 of 2020 Concerning Green Industry Standards for the Mineral Water Industry, 2020; Minister of Trade Regulation Number 23 of 2023 Concerning Export Policy and Regulation, 2023; Minister of Trade Regulation Number 36 of 2023 Concerning Import Policy and Regulation, 2023; Minister of Industry Regulation Number 62 of 2024 Concerning Mandatory Implementation of Indonesian National Standard for Bottled Water, 2024). The principal instruments include Law No. 7 of 2014 on Trade, elaborated through Minister of Trade Regulation (Permendag) No. 23 of 2023 on Export Policy and Regulation, and Permendag No. 36 of 2023 on Import Policy and Regulation. These regulations define licensing procedures, product classification, and export–import restrictions. Complementing this, Law No. 17 of 2019 on Water Resources sets forth the principles of sustainability and fairness in the use of water resources.

According to (Handayani, 2015), such regulatory design reflects Indonesia's political–legal doctrine that positions water as a state-controlled resource to prevent exploitation inconsistent with the principle of people's welfare. This doctrinal foundation reinforces the view that export activities involving bottled water must remain subordinated to domestic needs and ecological preservation (General Agreement on Tariffs and Trade 1994 (GATT 1994), 1994).

Several previous studies have examined various aspects of Indonesia's bottled water regulation and its intersection with international trade law. Research by Priadi et al. (2024) investigated regulatory overlap and enforcement efficiency in Indonesia's bottled water industry, finding that despite the existence of standards, regulatory overlap between agencies often hampers efficient enforcement, resulting in complex approval procedures for both domestic and imported bottled water products. The study emphasized that harmonization and digital integration via the Online Single Submission (OSS) system are critical to improving legal certainty and administrative efficiency.

Winarno (2024) explored the tension between the economic benefits and social values of water resource management, arguing that balancing these competing interests is vital for long-term resource security. The study emphasized that export activities must be carefully calibrated to ensure they do not compromise domestic water availability or ecological sustainability. Similarly, Masnun et al. (2024) analyzed export–import regulation and domestic supply security in Indonesia's natural resource management, concluding that administrative frameworks must prioritize public interest while accommodating legitimate trade objectives.

In the context of international trade law, several scholars have examined WTO jurisprudence on export restrictions and natural resource conservation. (Koning, 2013) analyzed how WTO jurisprudence interprets exhaustible natural resources flexibly, allowing countries to justify trade restrictions for sustainable management, provided measures are non-discriminatory and accompanied by domestic conservation actions. (Charnovitz, 2007) traced the evolution of WTO jurisprudence to accommodate environmental goals while remaining vigilant against protectionist measures disguised as conservation policies.

Comparative studies of WTO disputes involving export restrictions provide valuable insights. In China – Raw Materials (2011), the WTO Panel ruled that China's export restrictions on natural resources violated Article XI because they created unfair advantages for domestic industries. Similarly, in China – Rare Earths (2014), China's export quotas and duties on rare earth elements were found to violate Article XI and could not be justified under Article XX(g). The Appellate Body emphasized that conservation measures must be transparent, evidence-based, and accompanied by domestic restrictions demonstrating a genuine conservation purpose rather than industrial policy motives (W. T. O. A. Body, 1996a, 1996b, 1998, 2007; W. T. O. P. and A. Body, 2011, 2014).

(Pambudi, 2025) examined the fragmented institutional structure and policy implementation challenges in Indonesia, highlighting that regulatory fragmentation and insufficient inter-agency coordination exacerbate inefficiencies in trade governance. The study noted that overlapping authority between ministries creates bureaucratic delays that undermine regulatory predictability and export competitiveness.

Despite this body of scholarship, there remains a significant research gap in comprehensively analyzing Indonesia's bottled water export–import regulations through the specific lens of WTO principles, particularly GATT 1994 Articles I, III, XI, and Article XX(g) exceptions. Most existing studies either focus on domestic regulatory aspects without systematic international trade law analysis, or examine WTO jurisprudence in general terms without applying it to Indonesia's specific regulatory framework for bottled water. This gap is critical, given Indonesia's constitutional commitment to resource sovereignty and its parallel obligations under international trade law.

Indonesia's decision to restrict the export of locally produced bottled water (e.g., Aqua) while allowing imports of foreign bottled water (e.g., Fiji Water, Evian) raises important questions about consistency with the core WTO principles of non-discrimination, market access, and fair trade. The regulatory framework creates a complex administrative environment characterized by multi-layered permitting requirements, resource-based restrictions, and de facto domestic market obligations that potentially conflict with Indonesia's international trade commitments under the General Agreement on Tariffs and Trade (GATT) 1994.

This research aims to analyze Indonesia’s administrative legal framework governing bottled water export and import regulations; examine the compatibility of Indonesia’s bottled water trade policies with WTO principles—particularly GATT 1994 Articles I (Most-Favored-Nation Treatment), III (National Treatment), and XI (Prohibition of Quantitative Restrictions); evaluate potential justifications for Indonesia’s export restrictions under Article XX(g) environmental exceptions; and recommend policy reforms to harmonize Indonesia’s constitutional mandates with international trade obligations.

This study contributes to the understanding of how developing nations balance resource sovereignty with trade liberalization commitments. The findings provide practical insights for policymakers seeking to reform Indonesia's regulatory framework while maintaining environmental stewardship and constitutional obligations. Additionally, this research adds to the scholarly discourse on WTO compliance in natural resource management within the context of administrative law.

METHOD

Research Design

This study employs a normative legal research methodology with a comparative legal analysis approach. Normative legal research examines legal principles, doctrines, and regulations through the analysis of primary and secondary legal sources. The comparative approach enables systematic examination of Indonesia's domestic legal framework against international trade law standards, specifically WTO principles.

Data Sources

Primary Legal Sources:

- The 1945 Constitution of the Republic of Indonesia, particularly Article 33 on state control of natural resources
- Law No. 7 of 2014 on Trade
- Law No. 17 of 2019 on Water Resources
- Law No. 18 of 2012 on Food
- Minister of Trade Regulation No. 23 of 2023 on Export Policy and Regulation
- Minister of Trade Regulation No. 36 of 2023 on Import Policy and Regulation
- Minister of Industry Regulation No. 62 of 2024 on Mandatory Indonesian National Standard (SNI)
- Minister of Industry Regulation No. 47 of 2020 on Green Industry Standards
- General Agreement on Tariffs and Trade (GATT) 1994, including Articles I, III, XI, and XX

Secondary Legal Sources:

- WTO Panel and Appellate Body reports (China – Raw Materials, US – Gasoline, Japan – Alcoholic Beverages II, Brazil – Retreaded Tyres, US – Shrimp/Turtle)
- Academic literature on Indonesian administrative law and water governance
- Scholarly articles on WTO jurisprudence and trade-environment nexus

Analytical Framework

The analysis proceeded through four systematic stages:

Stage 1: Doctrinal Analysis of Indonesian Legal Framework

Examination of constitutional provisions, statutory laws, and ministerial regulations governing bottled water trade. This stage identified key administrative agencies, licensing procedures, product standardization requirements, and enforcement mechanisms.

Stage 2: Identification of Regulatory Barriers

Systematic categorization of administrative and regulatory barriers affecting bottled water exports, including: (a) complexity and multi-layered permitting; (b) resource-based restrictions and water conservation requirements; (c) de facto domestic market obligations; (d) standards misalignment with international norms; (e) excise policies on plastic packaging; (f) sub-national logistics and regulatory barriers.

Stage 3: Comparative Legal Analysis with WTO Principles

Application of WTO legal tests to Indonesia's regulatory measures. Each relevant GATT provision (Articles I, III, XI) was analyzed to determine whether Indonesia's policies constitute prima facie violations. WTO Panel and Appellate Body jurisprudence provided interpretative guidance for assessing discriminatory effects, market distortions, and quantitative restrictions.

Stage 4: Exception Analysis under Article XX(g)

Evaluation of whether Indonesia's export restrictions could be justified as measures relating to the conservation of exhaustible natural resources. This analysis applied the two-tier test established in WTO jurisprudence: (1) provisional justification under Article XX(g); (2) compliance with the chapeau requirement against arbitrary or unjustifiable discrimination.

Limitations

This study is limited to normative legal analysis and does not include empirical data on actual trade flows, environmental impacts, or stakeholder interviews. The analysis relies on publicly available legal documents and scholarly interpretations of WTO jurisprudence. Additionally, the rapidly evolving nature of Indonesian ministerial regulations may affect the currency of specific regulatory details.

RESULT AND DISCUSSION

Indonesia's Administrative Legal Framework

Product Standardization and Safety

The Indonesian government, through the Ministry of Industry, has made the Indonesian National Standard (SNI) for bottled water mandatory through Ministry of Industry Regulation Number 62 of 2024. This obligation aims to protect consumers, promote industry competitiveness, and create healthy business competition. The implementation of mandatory SNI includes Mineral Water, Natural Mineral Water, and Demineralized Water. The Food and Drug Supervisory Agency (BPOM) plays a central role by requiring bottled drinking water products to have a Distribution Permit (MD/ML), ensuring that products meet drinking water quality requirements and sanitation standards in the production process.

Priadi et al. (2024) emphasize that despite the existence of these standards, regulatory overlap between agencies often hampers efficient enforcement, resulting in complex approval procedures for both domestic and imported bottled water products. Therefore, harmonization and digital integration via the Online Single Submission (OSS) system are critical to improving legal certainty and administrative efficiency.

Trade and Customs Framework

International trade regulations are primarily governed by the Ministry of Trade and the Ministry of Finance (Directorate General of Customs and Excise). Bottled water exports are generally liberalized to stimulate foreign exchange. The main requirements for exporters are compliance with relevant product quality standards (SNI) and possession of a valid business license (Business Identification Number/NIB, which includes Customs Access). Export regulations are governed by Minister of Trade Regulation Number 23 of 2023 on Export Policy and Regulation.

Import regulations are governed by Minister of Trade Regulation Number 36 of 2023 on Import Policies and Regulations. Importing bottled drinking water requires a Business Permit in the import sector from the Minister of Trade. Imported bottled water is subject to Article 22 Income Tax on imports at a rate of 2.5% of the import value for importers using an Importer

Identification Number (API). The government implements monitoring mechanisms through Export Realization Report (LRE) requirements and Anti-Dumping Duty (BMAD) policies to protect domestic industries.

Institutional Framework and Licensing Procedures

The Ministry of Trade serves as the main regulator at the gateway to international trade, stipulating requirements for export licensing, conditions for export bans or restrictions, and administrative sanctions for non-compliance. BPOM holds critical administrative control over health and safety aspects, requiring Distribution Permits (MD for domestic products, ML for imported products) before bottled drinking water can be distributed in the domestic market. The Ministry of Industry and the National Standardization Agency (BSN) regulate technical quality aspects through mandatory SNI compliance. The Investment Coordinating Board (BKPM) provides Business Identification Numbers (NIB) through the OSS system, which serves as both business identity and Importer Identification Number (API).

As noted by (Hadipuro, 2010) and Priadi et al. (2024), overlapping authority and insufficient inter-agency coordination often result in bureaucratic delays that undermine regulatory predictability. From an administrative law perspective, this network of permits exemplifies the state's regulatory function in ensuring due process, public accountability, and legal certainty. However, practical inefficiencies indicate the need for reform toward a more integrated licensing mechanism.

Regulatory Barriers to Export Competitiveness

3.2.1 Multi-Layered Permitting Complexity

Bottled water exporters must obtain multiple permits from various ministries and agencies:

- Export Documents (PEB) from the Directorate General of Customs and Excise
- Health Certificate from BPOM meeting destination country standards
- Halal certificate from BPJPH for Muslim-majority destination countries
- Environmental reports and permits from KLHK related to water resource use and plastic packaging

This overlap and lengthy permitting process create bottlenecks that can lead to order cancellations for time-sensitive export contracts.

Resource-Based Restrictions and Water Conservation

Water Utilization Rights permits granted to bottled water producers are administratively bound to evaluations of raw water availability and environmental impact within operational areas. Public and academic criticism emphasizes that bottled water exports can be viewed as exporting vital raw water, potentially violating the principle of prioritizing public needs in access to clean water. Although no formal export quota exists, the audit and re-licensing process can be used as an administrative instrument to control total production volume, automatically limiting export capacity when domestic demand remains high.

Winarno (2024) and Masnun et al. (2024) note that exporting bottled water raises constitutional questions under Article 33, particularly regarding public access to water as a fundamental right. Hence, administrative re-licensing operates not merely as a technical requirement but as a normative safeguard to ensure that resource exploitation remains socially just.

De Facto Domestic Market Obligation

Although bottled water lacks a formal Domestic Market Obligation (DMO) scheme like coal or palm oil, the industry operates under de facto domestic market imperatives. The obligation to comply with mandatory SNI for domestic circulation demands significant production capacity commitments to the highly competitive domestic market. If exporters neglect domestic supply, the government can intervene through non-tariff policies such as in-depth audits or delays in extending marketing authorizations, effectively suppressing export incentives in favor of local market stability.

Standards Misalignment

BPOM maintains its own standards for bottled drinking water. When exporters target international markets, they must meet different standards for each destination country (e.g., FDA standards in the United States or FSANZ in Australia). Indonesia's lack of mutual recognition agreements (MRAs) with foreign food safety authorities exacerbates regulatory duplication, requiring dual testing processes—one for Indonesian standards and another for destination country standards—thereby increasing costs and time (Parag, 2023).

Additional Barriers

The potential introduction of excise duties on single-use plastic packaging, though environmentally progressive, could raise production costs and limit price competitiveness in export markets. Subnational logistics and regulatory barriers, such as truck restrictions during holidays and provincial-level sales bans, disrupt export schedules and divert managerial attention from export expansion to domestic regulatory compliance.

3.2.6 Impact on Competitiveness

The accumulation of administrative obstacles creates negative impacts:

- Increased Transaction Costs: Administrative compliance expenses reduce export profit margins
- Legal and Business Uncertainty: Lengthy processes complicate production planning and contract fulfillment
- Reduced Price Competitiveness: Administrative costs are passed to product prices
- Loss of Market Opportunity: Delays enable competitors from countries with simpler export systems to capture markets

As Pambudi (2025) emphasizes, this situation reveals a broader administrative challenge: while Indonesia aspires to promote sustainable industry and trade liberalization, its overlapping regulations and multi-tier licensing structure often function as de facto non-tariff barriers.

WTO Compliance Analysis

Most-Favored-Nation Treatment (Article I GATT 1994)

Article I:1 of GATT 1994 obliges every WTO Member to grant to all other Members any trade advantage or privilege accorded to like products from any other country. The objective is to prevent discrimination among trading partners. Indonesia's policies must ensure that import licensing, labeling, or quality-control regulations for bottled water apply uniformly to all WTO

Members. The principle applies not only to tariff rates but also to non-tariff measures such as administrative import approvals.

Finding: Indonesia's current framework does not appear to violate MFN obligations, as import requirements apply uniformly to all foreign bottled water regardless of origin. However, any preferential treatment granted to specific countries would constitute a violation.

National Treatment (Article III GATT 1994)

The National Treatment principle requires WTO Members to treat imported goods no less favorably than domestic like products. Indonesia restricts the export of domestic bottled water while permitting the import of foreign brands. Although NT typically governs the treatment of imported products within domestic markets, the combined effect may indirectly favor foreign producers over domestic ones. Local firms face export restrictions due to resource preservation policies and licensing requirements, while foreign brands encounter fewer administrative hurdles when entering the Indonesian market.

The WTO Appellate Body in Japan – Alcoholic Beverages II clarified that even formally neutral measures may breach National Treatment obligations if they modify the conditions of competition to the detriment of imported or domestic products. Indonesia's differentiated treatment could be interpreted as de facto discrimination, especially if the effect disadvantages local producers in the global market.

Finding: Indonesia's export restrictions combined with liberal import policies create an import–export asymmetry that may violate Article III. Local companies such as Aqua face export barriers, while foreign brands like Fiji Water and Evian freely access Indonesian markets, creating unequal competitive conditions.

Prohibition of Quantitative Restrictions (Article XI GATT 1994)

Article XI:1 prohibits export and import prohibitions or restrictions other than duties, taxes, or other charges. This provision prevents Members from using non-tariff barriers that distort trade flows. Indonesia's export licensing system for bottled mineral water—where administrative authorities determine export eligibility—constitutes a quantitative restriction if it effectively limits export volumes or imposes discretionary approvals.

In China – Raw Materials (2011), the WTO Panel ruled that China's export restrictions on natural resources violated Article XI because they created unfair advantages for domestic industries. Similarly, if Indonesia's restrictions are not transparently linked to legitimate environmental or conservation objectives, they could contravene Article XI obligations.

Finding: Indonesia's multi-layered export licensing system, combined with discretionary approval processes, functions as a de facto quantitative restriction on bottled water exports, potentially violating Article XI unless justified under Article XX exceptions.

Environmental Exceptions (Article XX(g) GATT 1994)

Article XX(g) permits measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption. The WTO Appellate Body in US – Gasoline emphasized that measures under Article XX(g) must not be applied in an arbitrary or unjustifiably discriminatory manner. The chapeau of Article XX requires that exceptions not serve as disguised restrictions on international trade.

The conservation of water resources provides a plausible justification. Several studies recognize water as an exhaustible natural resource due to increasing scarcity and over-extraction pressures. Koning (2013) emphasizes that WTO jurisprudence interprets exhaustible natural resources flexibly, allowing countries to justify trade restrictions for sustainable management, provided that measures are non-discriminatory and accompanied by domestic conservation actions.

However, Brazil – Retreaded Tyres demonstrates that even legitimate environmental measures must pass the chapeau test: they cannot result in arbitrary or unjustifiable discrimination. If Indonesia permits large-scale domestic bottling by foreign companies while prohibiting exports by local producers, it undermines the credibility of its environmental justification.

Finding: Indonesia could potentially invoke Article XX(g) environmental exceptions if export restrictions are: (1) genuinely related to groundwater conservation; (2) accompanied by comparable restrictions on domestic extraction and production; (3) scientifically justified with evidence of water scarcity or ecological risk; (4) transparently administered without arbitrary discrimination; and (5) publicly reported with environmental monitoring outcomes. If challenged before the WTO Dispute Settlement Body, Indonesia would bear the burden of proving these elements to avoid proceedings similar to China – Rare Earths (2014).

DISCUSSION

1. Tension Between National Sovereignty and International Commitments

Indonesia's bottled water policy reflects the fundamental tension between exercising national sovereignty over natural resources and honoring international trade commitments. Article 33 of the 1945 Constitution mandates that natural resources shall be controlled by the State for the greatest prosperity of the people. This constitutional foundation provides strong domestic justification for export restrictions aimed at ensuring water availability for Indonesian citizens.

However, as a WTO Member since 1995, Indonesia has committed to GATT 1994 obligations that limit the use of discriminatory trade measures and quantitative restrictions. The research findings demonstrate that Indonesia's administrative framework while constitutionally legitimate creates de facto barriers that may violate WTO principles of non-discrimination (Articles I and III) and prohibition of quantitative restrictions (Article XI).

This tension is not unique to Indonesia. Many developing nations struggle to balance resource protection with trade liberalization. As Charnovitz (2007) argues, WTO jurisprudence has evolved to accommodate environmental goals but remains suspicious of protectionist measures disguised as conservation policies. The challenge for Indonesia is to demonstrate that its export restrictions genuinely serve environmental objectives rather than economic protectionism.

2. Administrative Complexity as a Non-Tariff Barrier

The research reveals that Indonesia's multi-layered permitting system, involving multiple ministries and agencies with overlapping jurisdictions, functions as a significant non-tariff barrier to trade. While each individual requirement—health certificates, environmental permits, SNI compliance—may be justified on legitimate regulatory grounds, their cumulative effect creates substantial transaction costs and delays that impede export competitiveness.

(Priadi, 2024) and Pambudi (2025) highlight that regulatory fragmentation and insufficient inter-agency coordination exacerbate these inefficiencies. The lack of a unified licensing portal (despite the OSS system's introduction) and absence of mutual recognition agreements with major trading partners force exporters to navigate duplicative approval processes. This regulatory complexity disproportionately affects small and medium enterprises that lack resources to manage bureaucratic requirements.

From a WTO perspective, even facially neutral administrative procedures can constitute disguised restrictions on trade if they have discriminatory effects or lack transparent criteria. The discretionary nature of export licensing decisions, combined with unclear timelines for approvals, raises concerns about consistency with GATT Article X requirements for transparency and predictability in trade regulations.

3. Environmental Justification and Its Limitations

Indonesia's potential invocation of Article XX(g) environmental exceptions rests on the premise that groundwater is an exhaustible natural resource requiring conservation. This argument has merit given global water scarcity trends and Indonesia's growing urban population. The WTO Panel's acceptance in US – Shrimp/Turtle that living species constitute exhaustible resources suggests broad interpretive flexibility for conservation measures.

However, successfully invoking Article XX(g) requires meeting stringent criteria. First, the measure must genuinely relate to resource conservation—not merely have an incidental conservation effect. Second, it must be accompanied by restrictions on domestic production or consumption. Third, it must not discriminate arbitrarily between countries or constitute disguised protectionism.

The research findings suggest vulnerabilities in Indonesia's position. If Indonesia restricts bottled water exports while permitting intensive domestic extraction for local consumption, tourism, and industrial use, the measure fails the even-handedness test. Similarly, if foreign companies operating in Indonesia can freely bottle water for domestic sale while Indonesian companies face export barriers, this asymmetry undermines the conservation rationale and suggests protectionist intent.

Koning (2013) emphasizes that WTO jurisprudence requires scientific evidence demonstrating resource scarcity and ecological risk. Indonesia would need to present comprehensive data on groundwater depletion rates, extraction sustainability thresholds, and environmental monitoring outcomes. Transparent reporting mechanisms linking export restrictions to specific conservation targets would strengthen Indonesia's defense.

4. Asymmetric Treatment and Market Distortions

The most problematic aspect of Indonesia's policy is the asymmetric treatment between domestic and foreign bottled water producers. Local brands like Aqua face significant export barriers through licensing requirements, resource permits, and de facto domestic market obligations. Meanwhile, foreign brands like Fiji Water and Evian encounter relatively minimal barriers accessing Indonesian markets, subject primarily to standard import duties and BPOM certification.

This asymmetry creates several market distortions. First, it artificially constrains Indonesian producers' ability to capture export revenues and economies of scale in global markets. Second, it provides foreign brands with competitive advantages in Indonesia's lucrative domestic market without reciprocal access for Indonesian brands abroad. Third, it may discourage domestic investment in bottled water production capacity if companies cannot fully exploit export opportunities.

(Latina, 2011) observes that asymmetrical trade policies often lead to non-cooperative outcomes undermining market fairness. (Adam, 2022) similarly notes that Indonesia's export control regime reflects protectionist tendencies masked as environmental policy. From a National Treatment perspective, this de facto discrimination may violate Article III by modifying conditions of competition to disadvantage domestic producers in international markets.

5. Constitutional Obligations vs. Trade Liberalization

Indonesia faces a genuine policy dilemma rooted in conflicting constitutional and international obligations. Article 33 of the 1945 Constitution elevates natural resource control to constitutional status, reflecting post-colonial concerns about foreign exploitation and commitment to economic nationalism. Water, as a fundamental human need, carries particular political and social significance in Indonesian legal discourse.

(Winarno, 2024) argues that balancing economic benefits with social values of water is vital for long-term resource security. (Masnun, 2024) emphasize that export activities must remain subordinated to domestic needs and ecological preservation. These normative commitments, deeply embedded in Indonesian administrative law, create legitimacy for restrictive trade policies.

However, WTO commitments also carry legal weight. Indonesia voluntarily joined the multilateral trading system and accepted GATT disciplines in exchange for market access to other countries. International law principles of pacta sunt servanda (agreements must be kept) suggest that Indonesia cannot unilaterally disregard WTO obligations simply because they conflict with domestic policy preferences.

The solution lies not in choosing one obligation over another, but in policy harmonization. As discussed in the next section, Indonesia can maintain constitutional commitments to resource sovereignty while meeting WTO obligations through carefully calibrated regulatory reforms that are transparent, non-discriminatory, and genuinely oriented toward environmental conservation.

6. Comparative Lessons from WTO Jurisprudence

Indonesia can learn from other WTO cases involving export restrictions on natural resources. In China – Raw Materials, China argued that export restrictions on minerals were necessary for conservation and environmental protection. The Panel and Appellate Body rejected this defense because China failed to demonstrate that restrictions were applied evenhandedly to domestic consumption and were not primarily aimed at giving Chinese industries competitive advantages through cheaper raw material prices.

Similarly, in China – Rare Earths (2014), China's export quotas and duties on rare earth elements were found to violate Article XI and could not be justified under Article XX(g). The Appellate Body emphasized that conservation measures must be transparent, evidence-based, and accompanied by domestic restrictions demonstrating genuine conservation purpose rather than industrial policy.

These precedents suggest that Indonesia faces significant legal risk if challenged at the WTO. To strengthen its position, Indonesia must ensure that: (1) export restrictions are explicitly linked to quantified conservation targets; (2) domestic water extraction for all purposes (not just exports) is subject to comparable restrictions; (3) licensing decisions are based on transparent criteria without discretionary discrimination; and (4) regular monitoring reports demonstrate that restrictions effectively achieve conservation objectives.

7. Policy Reform Pathways

Based on the analysis, several policy reforms could help Indonesia balance constitutional mandates with WTO obligations:

Regulatory Harmonization and Simplification:

Streamline multi-layered permitting through enhanced digital integration. Consolidate overlapping approvals into unified licensing portal with clear timelines and transparent criteria. This reduces transaction costs without compromising regulatory objectives.

Quota Systems Linked to Sustainability:

Replace discretionary export licensing with transparent quota systems based on scientific assessments of sustainable extraction limits. Allocate quotas through non-discriminatory mechanisms (e.g., auctions, historical performance) rather than administrative discretion. This provides predictability for exporters while maintaining conservation control.

Mutual Recognition Agreements:

Negotiate MRAs with major trading partners to align Indonesian standards (SNI, BPOM) with international norms (FDA, FSANZ). This eliminates duplicative testing requirements and reduces compliance costs for exporters while maintaining product safety standards.

Even-Handed Domestic Restrictions:

Apply water extraction restrictions consistently across all uses—domestic production for local consumption, tourism, industrial applications, and exports. This demonstrates that conservation, not protectionism, motivates policy. Publicly report extraction volumes and environmental monitoring data to support conservation claims.

Inter-Agency Coordination Mechanisms:

Establish formal coordination bodies bringing together Ministry of Trade, Ministry of Environment, BPOM, and BKPM to ensure coherent policy implementation. Regular inter-ministerial meetings can identify and resolve administrative bottlenecks.

WTO-Consistent Environmental Diplomacy:

Proactively communicate conservation goals to trading partners through WTO notifications and bilateral consultations. Transparent communication reduces likelihood of disputes and demonstrates good faith commitment to balancing trade and environment.

CONCLUSION

Indonesia's regulation of bottled water exports and imports reflects the complex interplay between national administrative law, constitutional obligations, and international trade commitments. The study found that Indonesia's multi-layered permitting system, resource-based restrictions, and domestic market obligations hinder export competitiveness and raise potential conflicts with WTO principles—particularly Article III (National Treatment) and Article XI (Prohibition of Quantitative Restrictions)—by creating uneven conditions that disadvantage domestic producers. Although the administrative framework aligns with Article 33 of the 1945 Constitution, it operates as a de facto non-tariff barrier marked by regulatory overlap and discretionary licensing. Nonetheless, Indonesia may justify certain export restrictions under Article XX(g) of the GATT if they are genuinely aimed at groundwater conservation, supported by scientific evidence, applied equitably, and transparently administered. The study highlights that reconciling national sovereignty with international trade need not be a zero-sum pursuit; through regulatory simplification, transparent quotas, inter-agency coordination, and balanced domestic restrictions, Indonesia can safeguard its natural resources while honoring WTO obligations. This research enriches the discourse on trade–environment linkages in developing economies and offers policy insights for sustainable governance. Ultimately, Indonesia's ability to balance resource sovereignty with trade obligations will depend on its political will to reform, its adherence to transparency and evidence-based policy, and its recognition that sustainable development and fair trade are mutually reinforcing in the global economy.

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