

CARDOZO LAW REVIEW
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CORN WAR: A TRADE FIGHT BETWEEN THE UNITED STATES AND MEXICO

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An international fight grows over corn. The United States claims that México's ban on genetically modified (GMO) corn violates the United States-Mexico-Canada Agreement (USMCA). México prohibits GMO corn for human consumption. American arguments focus on Sanitary and Phytosanitary (SPS) measures, covered in Chapter 9 of the USMCA. A trade panel will review these.

This Essay first describes SPS arguments and relevant trade rules. The United States' complaints emphasize that México's ban is excessive, is not consistent with international standards, and mishandles risks. Second, the Essay identifies the obstacles American positions face: weak mandates and deference to México. Chapter 9 of the USMCA does not require conformity with international standards or risk assessments. Rather, it only requires that México consider these standards and risks. Plus, Chapter 9 defers to Mexico's determinations on food safety, which are labelled the "appropriate level of protection" under USMCA and World Trade Organization (WTO) rules. The panel will defer to the level set by México and then

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evaluate American complaints on standards, trade restrictions, and risks. The upshot: the USMCA is not the clear free trade answer the United States seeks. Because of this, it should pursue resolution versus fruitless legal conflict.

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INTRODUCTION

Corn feeds a fight between two neighbors, the United States and México. A great deal is at stake in this conflict. Last year, the United States was the world's largest producer and exporter of the grain.¹ México is the largest buyer of American corn, with import volumes rising recently.² Corn (*maíz*) is essential to most meals in México and is a vital part of México's national culture. International trade law mediates this dynamic, securing México as a dependable corn buyer since the North American Free Trade Agreement (NAFTA) took effect in 1994.³ This dynamic continues with the United States-Mexico-Canada Agreement (USMCA), an update to NAFTA from 2020.⁴ Given their proximity and cooperation, the neighbors should be happy.

But agricultural exports sow conflict. The stress points are multiple. One is dependency. Nature binds producers to the land and, simultaneously, eaters depend on farms for basic food items. Neither can easily change their course. Second, competition breeds pressure. Recent data shows Brazil will surpass the United States as corn's largest exporter.⁵ Third, stresses sprout into controversies whenever food imports are banned. For exporters, the big fear is losing overseas buyers. The United States is no stranger to this. Trade law is its go-to sword in these battles, evident in protracted disputes in the World Trade

¹ See *Feed Grains Sector at a Glance*, ECON. RSCH. SERV., U.S. DEP'T AGRIC. (Dec. 21, 2023), <https://www.ers.usda.gov/topics/crops/corn-and-other-feed-grains/feed-grains-sector-at-a-glance> [<https://perma.cc/N5SX-ECXJ>].

² See Karen Braun, *Mexico Remains Loyal US Corn Buyer with Record Haul Despite Dispute*, REUTERS (Jan. 26, 2024, 4:34 AM), <https://www.reuters.com/markets/commodities/mexico-remains-loyal-us-corn-buyer-with-record-haul-despite-dispute-2024-01-26> (last visited Apr. 7, 2024); *Mexico Trade Snapshot Year*, CORN REFINERS ASS'N 1, https://corn.org/wp-content/uploads/2023/02/CRA_Country_Profiles_2022_export-markets.pdf [<https://perma.cc/WTT2-BJ8R>].

³ See Ernesto Hernández-López, *The U.S.-Mexico Corn Conflict is Popping Off*, ZÓCALO PUB. SQUARE (Oct. 26, 2023), <https://www.zocalopublicsquare.org/2023/10/26/us-mexico-gmo-corn-conflict/ideas/essay> [<https://perma.cc/6PZR-GUS9>].

⁴ See *Agreement between the United States of America, the United Mexican States, and Canada 7/1/20 Text*, OFF. OF THE U.S. TRADE REPRESENTATIVE [hereinafter USMCA], <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/agreement-between> [<https://perma.cc/E3Q4-G92R>].

⁵ See Karl Plume, *Decades of US Corn Export Dominance Fade as Brazil Seizes Top Supplier Crown*, REUTERS (July 7, 2023, 6:09 AM), <https://www.reuters.com/markets/commodities/decades-us-corn-export-dominance-fade-brazil-seizes-top-supplier-crown-2023-07-07> (last visited Apr. 7, 2024).

Organization (WTO) in 1998 and 2008 over beef hormones and in 2006 over biotechnology.⁶

Positions are now cast in an international dispute over corn. In 2023, the United States invoked a trade panel⁷ after México banned genetically modified (GMO) corn in a *Decree*⁸ from February of that year. GMOs refer to a farming method that inserts genetic material from another organism into the seeds of a crop.⁹ For corn, seeds are engineered to make them more resistant to herbicides like glyphosate.¹⁰ Capitalizing on this, GMO farms need less human labor to tend crops. The *Decree* sparked immediate anxieties since most American corn is GMO.¹¹ The United States argues that GMO corn is safe, that science proves this, and that

⁶ See *DS26: European Communities—Measures Concerning Meat and Meat Products (Hormones)*, WTO (Apr. 12, 2016), https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds26_e.htm [<https://perma.cc/R59Z-SQ88>] (summarizing the legal aspects of the beef hormone dispute from 1996 to 2009); RENÉE JOHNSON, CONG. RSCH. SERV., R40449, THE U.S.-EU BEEF HORMONE DISPUTE 1 (2017) (describing how the dispute challenged United States beef exports for over thirty years); *DS291: European Communities—Measures Affecting the Approval and Marketing of Biotech Products*, WTO (Feb. 24, 2010), https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds291_e.htm [<https://perma.cc/5REC-GKTR>] (summarizing the legal aspects of the biotech dispute from 2003 to 2006); CONG. RSCH. SERV., RS21556, AGRICULTURAL BIOTECHNOLOGY: THE U.S.-EU DISPUTE 1 (2010) (presenting the ongoing difficulties in exporting biotechnology products to the EU).

⁷ See Press Release, Off. U.S. Trade Representative, United States Establishes USMCA Dispute Panel on Mexico's Agricultural Biotechnology Measures (Aug. 17, 2023), <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2023/august/united-states-establishes-usmca-dispute-panel-mexicos-agricultural-biotechnology-measures> [<https://perma.cc/852U-7ETP>].

⁸ For the *Decree* announcement, see Comunicado, Secretaría de Economía, *Se publica el Decreto por el que se establecen diversas acciones en materia de glifosato y maíz genéticamente modificado*, GOBIERNO DE MÉXICO (Feb. 13, 2023), <https://www.gob.mx/se/prensa/se-publica-el-decreto-por-el-que-se-establecen-diversas-acciones-en-materia-de-glifosato-y-maiz-geneticamente-modificado> [<https://perma.cc/LA6T-M9R2>]. For the actual *Decree*, see *DECRETO por el que se establecen diversas acciones en materia de glifosato y maíz genéticamente modificado*, DIARIO OFICIAL DE LA FEDERACIÓN (Feb. 2, 2023) [hereinafter *Decree*], https://dof.gob.mx/nota_detalle.php?codigo=5679405&fecha=13/02/2023#gsc.tab=0 [<https://perma.cc/6WLC-HQ4K>]. For a brief description of the *Decree* in English, see ALEXANDER CHINH, FOREIGN AGRIC. SERV., MX2023-0010, MEXICO: MEXICO ISSUES 2023 CORN DECREE TO SUBSTITUTE GRADUALLY BIOTECH CORN USED FOR HUMAN CONSUMPTION AND FOR ANIMAL FEED (2023).

⁹ See Gabriel Rangel, *From Corgis to Corn: A Brief Look at the Long History of GMO Technology*, HARV. KENNETH C. GRIFFIN GRADUATE SCH. ARTS & SCIS. (Aug. 9, 2015), <https://sitn.hms.harvard.edu/flash/2015/from-corgis-to-corn-a-brief-look-at-the-long-history-of-gmo-technology> [<https://perma.cc/RXZ7-B4W5>].

¹⁰ See RACHEL A. SCHURMAN, ENGINEERING TROUBLE: BIOTECHNOLOGY AND ITS DISCONTENTS 4 (Rachel A. Schurman & Dennis Doyle Takahashi Kelso eds., 2003); see also *Pocket K No. 10: Herbicide Tolerance Technology: Glyphosate and Glufosinate*, ISAAA (Mar. 2020), <https://www.isaaa.org/resources/publications/pocketk/10/default.asp> [<https://perma.cc/JN6M-XPKP>] (discussing genetic engineering and crop resistance generally).

¹¹ See Ernesto Hernández-López, *Drop it America and Canada: A Corn Clash with Mexico Helps No One*, AL JAZEERA (Apr. 21, 2023), <https://www.aljazeera.com/opinions/2023/4/21/drop-it-america-and-canada-a-corn-clash-with-mexico-helps-no-one> [<https://perma.cc/CC7V-CUJR>].

México unfairly closes itself to free trade in corn, which the USMCA guarantees.¹²

In August, a USMCA trade panel began reviewing this controversy.¹³ The dispute specifically regards México banning GMO corn for human consumption. This effectively outlaws GMO corn imports, if they are destined for human food, but it only bans corn used in tortillas or dough (*masa*).¹⁴ The *Decree* expressly says GMO corn for animal feed and for industrial use remains legal.¹⁵ Since México is already self-sufficient in corn for human consumption, it argues the *Decree* does not impact United States imports.¹⁶ Moreover, the United States does not really grow corn for human consumption.¹⁷

México passed the *Decree* citing human health, biodiversity,¹⁸ and food security justifications. It points to cancer risks from herbicides, like

¹² See Press Release, Off. U.S. Trade Representative, WHAT THEY ARE SAYING: U.S. Requests USMCA Dispute Settlement Consultations on Mexico's Agricultural Biotechnology Measures (June 9, 2023), <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2023/june/what-they-are-saying-us-requests-usmca-dispute-settlement-consultations-mexicos-agricultural> [<https://perma.cc/XEF7-BJZN>]. For similar perspectives from a corn lobbying association, see Bryan Goodman, *As Mexico Implements New Decree, NCGA Amplifies Call for Biden Administration to Initiate Dispute Settlement Under USMCA*, NAT'L CORN GROWERS ASS'N (Feb. 14, 2023), <https://www.ncga.com/stay-informed/media/in-the-news/article/2023/02/as-mexico-implements-new-decree-ncga-amplifies-call-for-biden-administration-to-initiate-dispute-settlement-under-usmca> [<https://perma.cc/XSK4-R25P>].

¹³ See Press Release, United States Establishes USMCA Dispute Panel on Mexico's Agricultural Biotechnology Measures, *supra* note 7.

¹⁴ See Comunicado, Secretaría de Economía, *supra* note 8. The *Decree* is part of larger Mexican efforts to increase food security, eliminate risks from glyphosate, and secure opportunities for farmers. See Timothy Wise, *Mexico's Undersecretary of Agriculture Víctor Suárez on the Campaign for Food Self-Sufficiency*, INST. AGRIC. & TRADE POL'Y (Sept. 28, 2023), <https://www.iatp.org/stop-cheapening-mexicos-white-native-corn> [<https://perma.cc/2G6K-RB5C>].

¹⁵ See *Decree*, *supra* note 8.

¹⁶ See Comunicado, Secretaría de Economía, *supra* note 8; Comunicado, Secretaría de Economía, *Recibe la Secretaría de Economía solicitud de USTR para establecer un panel arbitral del T-MEC sobre maíz transgénico*, GOBIERNO DE MÉXICO (Aug. 17, 2023), <https://www.gob.mx/se/prensa/recibe-la-secretaria-de-economia-solicitud-de-ustr-para-establecer-un-panel-arbitral-del-t-mec-sobre-maiz-transgenico> [<https://perma.cc/SKA5-G95W>].

¹⁷ Nearly all United States corn production is for something other than human consumption. See, e.g., *Niche Corn Opportunities*, AGRIC. MKTG. RES. CTR. (Apr. 2022), <https://www.agmrc.org/commodities-products/grains-oilseeds/corn-grain> [<https://perma.cc/Y67M-ED7W>] (stating that, “only about [three percent]” of corn is “for human consumption annually” and less than one percent of that is white corn); STEVEN ZAHNISER, NICOLÁS FERNANDO LÓPEZ LÓPEZ, MESBAH MOTAMED, ZULLY YAZMIN SILVA VARGAS & TOM CAPEHART, ECON. RSCH. SERV., USDA, FDS-19F-01, THE GROWING CORN ECONOMIES OF MEXICO AND THE UNITED STATES 15 (2019) (describing production as “mainly” yellow corn “used primarily as livestock feed, as a feedstock for ethanol production, and for export”).

¹⁸ For a discussion of the GMO corn regulation in México, its history and objectives in food security, biodiversity protection, rural development, and limiting cancer risks, see María E. Álvarez Buylla-Roces, *Salud y soberanía alimentaria: maíz sin glifosato y transgénicos*, LA JORNADA (May 18, 2023), <https://www.jornada.com.mx/2023/05/18/opinion/018a2pol> [<https://perma.cc/9VN7-F7QU>].

glyphosate, needed in GMO farming.¹⁹ Plus, corn is the major source of calories for all Mexicans. Accordingly, the *Decree* is a food security measure guaranteeing domestic supply.²⁰

The United States' legal arguments emphasize Sanitary and Phytosanitary (SPS) measures governed by Chapter 9 of the USMCA.²¹ SPS focuses on food safety.²² SPS rules have the basic objective of balancing trade in food and agricultural products with a country's sovereign right to protect human, animal, or plant life and/or health in their territory.²³ Said simply, Chapter 9 and international SPS rules provide the means to stop food imports²⁴ if a country employs measures based on science and if they take the required procedural steps to enact

¹⁹ One of the *Decree's* objectives is to avoid risks from glyphosate. See *Decree*, *supra* note 8; Timothy A. Wise, *Science, Precaution, and Mexico's GMO Corn Restrictions*, FOODTANK, <https://foodtank.com/news/2023/02/science-precaution-and-mexicos-gmo-corn-restrictions> [<https://perma.cc/AJ7M-E7X6>]; Timothy A. Wise, *Mexico Calls U.S. Bluff on Science of GMO Corn Restrictions*, FOODTANK, <https://foodtank.com/news/2023/03/mexico-calls-us-bluff-on-science-of-gmo-corn-restrictions> [<https://perma.cc/WD8V-46GZ>]. Additionally, limiting the risks from glyphosate is key to México's food security. In fact, eighteen countries worldwide have restricted its use, but there is no scientific consensus on its safety. See *Maíz transgénico: defender la vida*, LA JORNADA (Aug. 18, 2023), <https://www.jornada.com.mx/2023/08/18/opinion/002a1edi> [<https://perma.cc/XW8W-4N4G>].

²⁰ See *Maíz transgénico: defender la vida*, *supra* note 19.

²¹ See, e.g., *Resource: Copy of the Dispute Panel Request*, Subheading to *United States Establishes USMCA Dispute Panel on Mexico's Agricultural Biotechnology Measures*, OFF. U.S. TRADE REPRESENTATIVE, (Aug. 17, 2023) [hereinafter Panel Request], <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2023/august/united-states-establishes-usmca-dispute-panel-mexicos-agricultural-biotechnology-measures> [<https://perma.cc/EWT6-7HYU>]. For the treaty provisions mentioned in the Panel Request, see USMCA, *supra* note 4.

²² Specifically, Chapter 9 applies to measures that “protect human, animal, or plant life or health.” See USMCA, *supra* note 4, art. 9.3.1(a). This objective is used throughout Chapter 9. See, e.g., *id.* art. 9.4.3 (delineating the relation between SPS measures and market access obligations); *id.* art. 9.6.2 (affirming the right to adopt SPS measures); *id.* arts. 9.6.3, 9.6.8(a) (requiring that a risk analysis be appropriate under the circumstances); *id.* art. 9.6.6(a) (ensuring SPS measures “are applied only to the extent necessary”).

²³ See PETER VAN DEN BOSSCHE & WERNER ZDOUC, *THE LAW AND POLICY OF THE WORLD TRADE ORGANIZATION: TEXT, CASES, AND MATERIALS* 1029 (5th ed. 2022); see also Ching-Fu Lin & Yoshiko Naiki, *An SPS Dispute without Science? The Fukushima Case and the Dichotomy of Science/Non-Science Obligations under the SPS Agreement*, 33 EUR. J. INT'L L. 651, 677–78 (2022) (describing SPS rules as a balancing between interests). For this Essay, “country,” “government,” and “party” (or their plural) mean the same thing. The USMCA refers to the three countries—the United States, México, and Canada—as “Parties,” see USMCA, *supra* note 4, USMCA Protocol, while the WTO's texts refer to countries as “Members” and the Codex's texts refer to countries as “governments.”

²⁴ See Ching-Fu Lin, *Interactions between food safety protection and trade liberalization in the WTO and FTAs*, in RESEARCH HANDBOOK ON INTERNATIONAL FOOD LAW 243, 245 (Michael T. Roberts ed., 2023) (describing how SPS measures can function as barriers to trade); VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1021 (explaining that agriculture exporters find SPS measures impede market access).

these measures.²⁵ This is a significant exception to free trade. SPS provisions like in the USMCA, offer countries concrete and negotiated ways to stop imports, and they are common in most international trade pacts.²⁶ International SPS rules have frustrated American exporters before, most notably in disputes over beef and biotechnology exports to the European Union (EU).²⁷

This Essay both explains and predicts.²⁸ It explains that the United States makes three types of arguments, regarding excess, inconsistency, and risks.²⁹ In terms of excess, the United States claims the *Decree* has

²⁵ Chapter 9 incorporates the definitions from the WTO's SPS Agreement, with the exception of those definitions specifically enumerated in the USMCA. *See* USMCA *supra* note 4, art. 9.1. For the WTO's definitions, *see The WTO Agreement on the Application of Sanitary and Phytosanitary Measures*, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex A [hereinafter SPS Agreement], https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm [<https://perma.cc/4HLL-GSAE>].

²⁶ *See* Lin, *supra* note 24, at 247; Filippo Fontanelli, *Unspoken SPS-Plus and SPS-Minus Aspirations: Biotechnologies in EU and US Trade Agreements*, 12 EUR. J. RISK REG. 564, 578–79 (2021). SPS measures have evolved since initial WTO commitments. Markus Wagner describes SPS approaches as either “SPS-Plus” or “SPS-Minus.” *See* Markus Wagner, *The Future of Sanitary and Phytosanitary Governance: SPS-Plus or SPS-Minus?*, 51 J. WORLD TRADE 445, 450–51 (2017). SPS-Plus looks to increase cooperation, communication, and transparency between parties. *Id.* It adds to what the WTO members agreed to and actively avoids conflicts. *Id.* Distinctly, the SPS-Minus approach allows for states to take precaution when there is a lack of information on the risk. *See id.* It represents a sort of floor for SPS regulation. Filippo Fontanelli describes the USMCA as SPS-Plus. *See* Fontanelli, *supra* note 26, at 578–79.

²⁷ *See supra* note 6.

²⁸ The objective is to present SPS arguments in an accessible manner for readers not versed in trade disputes. The goal is to show what this dispute is about and its most likely course given the legal arguments made by the United States. For more theoretically informed research into GMO corn and trade, *see generally* Ernesto Hernández-López, *Racializing Trade in Corn: México Fights Maíz Imports and GMOs*, 25 J. INT'L ECON. L. 259 (2022) (examining corn and trade from racial capitalism perspectives); Ernesto Hernández-López, *GMO Corn in México: Precaution as Law's Decolonial Option*, 2 LAW, TECH. & HUMS. 97 (2020) (explaining the environmental politics motivating of GMO regulation); Ernesto Hernández-López, *GMO Corn, México, and Coloniality*, 22 VAND. J. ENT. & TECH. L. 724 (2020) (presenting legal disputes over GMOs as about ideology, authority, and economics).

²⁹ This Essay focuses on legal arguments made by the United States in a dispute panel convened by the USMCA Secretariat. When this Essay was written, only the United States' first submission was available to the public. As such, legal arguments from México's reply or rebuttal from either party, from Canada, or non-governmental organizations are not examined. Additional legal arguments are expected from the United States, México, Canada, and the organizations. For México's initial reply, *see* UNITED MEXICAN STATES, MEX-USA-2023-31-01, MEXICO—MEASURES CONCERNING GENETICALLY ENGINEERED CORN, INITIAL WRITTEN SUBMISSION OF THE UNITED MEXICAN STATES (Jan. 15, 2024, public version released Mar. 5, 2024) [hereinafter MÉXICO'S INITIAL REPLY SUBMISSION], <https://www.worldtradelaw.net/document.php?id=usmca/submissions/mexico-ge-corn-usmca-mexico-submission.pdf> [<https://perma.cc/4QHS-6SE6>].

excessive commercial impacts and unnecessary protections.³⁰ For inconsistencies, the United States argues that the ban is not based on international food safety standards and is not based on scientific principles.³¹ Commenting on risks, the United States claims that the *Decree* was not developed with an evaluation of associated risks to food safety.³² The United States also argues that it did not have an opportunity to comment on any evaluation.³³

This Essay predicts that international SPS rules pose two significant challenges³⁴ for the United States' positions: weak mandates³⁵ and deference to Mexican determinations.³⁶ SPS rules do not require conformity. Article 9.6 only requires that SPS measures be "based on"³⁷ things like international standards or scientific principles. Furthermore, México is the one that determines the level of food safety protection within its borders. The panel will defer to this determination. More precisely, Chapter 9 affirms that México sets its "appropriate level of protection" (ALOP).³⁸ Put simply, the *Decree* does not need to conform to standards and science, and México sets its level of food safety protection for the *Decree*.

American perspectives on the *Decree* do not fully appreciate México's discretion to employ food safety measures, provided by Chapter 9 and SPS doctrine. Over decades, WTO disputes have shaped this doctrine with rulings over similar food safety controversies. They involved equivalent rules on excess, inconsistency, and risk evaluation.³⁹ The established principles of this doctrine provide the best guidance for how the USMCA panel will examine the *Decree*. Put more simply, this

³⁰ The United States' argument paraphrases Article 9.6.10 regarding measures that are "more trade restrictive than required" and Article 9.6.6(a) ensuring measures are "applied only to the extent necessary." See Panel Request, *supra* note 21; USMCA, *supra* note 4, arts. 9.6.6(a), 9.6.10.

³¹ This argument also paraphrases Articles 9.6.3 and 9.6.6(b). See Panel Request, *supra* note 21; USMCA, *supra* note 4, arts. 9.6.3, 9.6.6(b).

³² This argument summarizes Article 9.6.8. See Panel Request, *supra* note 21; USMCA, *supra* note 4, art. 9.6.8.

³³ This argument likewise paraphrases Article 9.6.7. See Panel Request, *supra* note 21; USMCA, *supra* note 4, art. 9.6.7.

³⁴ The focus is on challenges posed by international trade law, emphasizing USMCA obligations and SPS doctrine. This does not refer to any factual claims or evidence the parties make.

³⁵ See *infra* notes 82–84 and accompanying text (examining USMCA Articles 9.6.1, 9.6.3, 9.6.7, 9.6.8, 9.6.9).

³⁶ See *infra* notes 85–94 and accompanying text (examining USMCA Articles 9.6.3, 9.6.4(a), 9.6.9, 9.6.10, 9.7.1, 9.7.2 and established SPS doctrine).

³⁷ See *infra* notes 82–84 and accompanying text (examining USMCA Articles 9.6.1, 9.6.3, 9.6.6(b)).

³⁸ See USMCA, *supra* note 4, arts. 9.6.4(a), 9.7.1, 9.7.2. For a discussion on ALOP, see generally Yury Rovnov, *Appropriate Level of Protection: The Most Misconceived Notion of WTO Law*, 31 EUR. J. INT'L L. 1343 (2020) (examining how dispute panels use the ALOP standard).

³⁹ See *infra* Section I.B.

established set of international trade rules offers the clearest indication of the legal obstacles United States' positions will face.

The explanations and predictions set forth herein are extremely important now, even as the trade panel has not held hearings yet. The panel will produce a report addressing technical matters intrinsic to SPS rules. This focus on SPS should be understood by trade observers, policymakers, and advocates for food security, farm exports, biotechnology products, and the environment.

This Essay's scholarly perspective on trade law offers much needed illumination. It helps observers understand that the contest is framed by SPS rules on issues like risk evaluation, consistency with standards, and levels of protection. This is the legal reality, even if divergent perspectives on science, food safety, agriculture, or food security fuel the tensions. An appreciation for SPS rules aids in following the dispute. This is not easy. Trade disputes over food issues can be prolonged and irresolute. For over two decades the United States and Canada have fought over dairy imports,⁴⁰ and the European Union and United States controversy over beef was longer.⁴¹

In simple terms, this Essay shows how trade agreements contain significant exceptions to free trade. Based on these exceptions, countries develop important policies. International trade contests are increasingly about similar exceptions. They involve policies sourced in national security⁴² or sustainability, like tax credits for electric vehicles, renewable energy regulations, and climate policies.⁴³

The dispute over GMO corn involves highly technical areas of law: SPS rules and the USMCA. Trade law is very specific, with expertise typically limited to attorneys versed in international arbitration or treaty

⁴⁰ In fact, in less than four years since the signing of the USMCA, in addition to decades of prior contests, two USMCA dispute panels have been established over dairy imports. See Ernesto Hernández-López, *Canada's Dairy Lesson Can Help Solve Mexico Corn Crisis*, CANADA'S NAT'L OBSERVER (Jan. 16, 2024), <https://www.nationalobserver.com/2024/01/16/opinion/canada-dairy-lesson-can-help-solve-mexico-corn-crisis> [<https://perma.cc/CP27-6UCZ>]; Janyce McGregor, *Trudeau Government Claims Victory in Latest Trade Dispute with U.S. Over Dairy*, CBC (Nov. 24, 2023, 9:00 AM), <https://www.cbc.ca/news/politics/dairy-supply-management-u-s-1.7037957> [<https://perma.cc/VM92-CCBZ>].

⁴¹ See *supra* note 6.

⁴² See James Bacchus, *The Black Hole of National Security*, CATO INST. (Nov. 9, 2022), <https://www.cato.org/policy-analysis/black-hole-national-security> [<https://perma.cc/94CZ-523P>].

⁴³ See Directorate-Gen. for Trade, *WTO Rules on Renewable Energy Dispute*, EUR. COMM'N (Mar. 5, 2024), https://policy.trade.ec.europa.eu/news/wto-rules-renewable-energy-dispute-2024-03-05_en [<https://perma.cc/74TY-HBZT>]; *Climate Ambitions Threaten a New Wave of Trade Protectionism*, ECONOMIST INTEL. UNIT (Oct. 12, 2023), <https://www.eiu.com/n/climate-ambitions-threaten-a-new-wave-of-trade-protectionism> [<https://perma.cc/4FDA-QZXK>]; Marc L. Busch, *The US is redefining free trade agreements to justify EV tax credits*, THE HILL (Apr. 21, 2023, 2:00 PM), <https://thehill.com/opinion/finance/3962589-the-us-is-redefining-free-trade-agreements-to-justify-ev-tax-credits> [<https://perma.cc/SV7D-C7ML>].

negotiations. SPS is even more circumscribed, understood by experts in public health or trade in food, animals, and plants. The USMCA⁴⁴ is the most niche, barely three years old.⁴⁵ With this in mind, it is misguided to see the GMO corn dispute as just about the science on GMO safety or just about free trade.

Chapter 9 and SPS rules have been at the center of legal controversy ever since the United States threatened to invoke a panel.⁴⁶ This progressed with the United States' written submission, something like a legal complaint,⁴⁷ and the dispute continues with México's reply and input from Canada and interested non-governmental entities.⁴⁸ SPS rules will fuel the dispute's later stages: panel hearings and panel reports. A final panel report, providing legal and factual findings, is expected by November of 2024.⁴⁹ It can find México's *Decree* is consistent or

44 For USMCA Chapter 31 disputes, there is a complaint that actions of a USMCA party are inconsistent with the treaty. See *Rules of Procedure for Chapter 31 (Dispute Settlement)*, THE SECRETARIAT: CANADA-MEXICO-UNITED STATES, art. 14.1, https://can-mex-usa-sec.org/secretariat/assets/pdfs/usmca-aceum-tmec/rulesofprocedure_chap31-eng.pdf [<https://perma.cc/64JK-SFNK>] (establishing the burden of proof for a complaining party); USMCA, *supra* note 4, art. 31.13(b) (describing what a panel can determine).

45 The agreement was finalized in 2020. See USMCA, *supra* note 4. For the current information on USMCA disputes—Canada often referring to the USMCA as the CUSMA—see *Chapter 31 (Dispute Settlement) Disputes*, THE SECRETARIAT: CANADA-MEXICO-UNITED STATES (Mar. 27, 2024) [hereinafter *Chapter 31 (Dispute Settlement) Disputes*], https://can-mex-usa-sec.org/secretariat/dispute-differends-controversias/chapter-chapitre-capitulo_31.aspx?lang=eng [<https://perma.cc/7XGS-EVXC>]. As of March 2024, there have only been six disputes between the three parties, with three disputes completed, three still active, and the corn dispute being the only one focused on SPS. *Id.*

46 See Hernández-López, *supra* note 11; Panel Request, *supra* note 21.

47 See U.S. INITIAL WRITTEN SUBMISSION, *infra* note 58.

48 Publicly available information on the dispute is delayed, sometimes by months. Official legal filings and the status of any USMCA dispute is distributed via the Trade Agreements Secretariat (TAS) E-Filing System, maintained by the U.S. Department of Commerce, International Trade Administration. See *Chapter 31 (Dispute Settlement) Disputes*, *supra* note 45. For information on how to access the TAS E-Filing System, see OCIO, *Trade Agreements Secretariat (TAS) Electronic Filing System (E-filing) End User Guide*, DEP'T COM. INT'L TRADE ADMIN. (Jan. 2024), https://can-mex-usa-sec.org/secretariat/assets/pdfs/tasefile_userguide_2024-01-eng.pdf [<https://perma.cc/DC4Z-RU7M>]. The system is accessible by parties to the dispute, third parties to the dispute, and the public. It requires registration to access records available to the public. For some of the filings already produced as of the writing of this Essay, see *Food Sovereignty, Trade and Mexico's GMO Corn Policies*, INST. FOR AGRIC. & TRADE POL'Y, <https://www.iatp.org/food-sovereignty-trade-and-mexicos-gmo-corn-policies#usmca-dispute-resources> [<https://perma.cc/BV8Q-W5SC>]. For Canada's submission, see CANADA, MEX-USA-2023-31-01, MEXICO – MEASURES CONCERNING GENETICALLY ENGINEERED CORN, THIRD PARTY WRITTEN SUBMISSION OF CANADA (Mar. 15, 2024, public version released Apr. 5, 2024), <https://cban.ca/wp-content/uploads/MEXUSA20233101ThirdPartyWritten20Submissioncorrected20version.pdf> [<https://perma.cc/Z7FG-4HQW>]. For the request for participation and submissions from NGOs, see *USMCA corn case submissions*, INST. FOR AGRIC. & TRADE POL'Y (Apr. 8, 2024), <https://www.iatp.org/usmca-corn-case-submissions> [<https://perma.cc/73RP-T5K4>].

49 See *GM Corn Ban Updates*, IL CORN (Feb. 9, 2024), <https://www.ilcorn.org/news-and-media/current-news/article/gm-corn-ban-updates> [<https://perma.cc/LPG3-5HG6>].

inconsistent with the trade agreement.⁵⁰ If it finds inconsistencies, the report provides a basis to negotiate a settlement between the United States and México. If that fails, the United States can seek sanctions to motivate México to comply with final report findings.⁵¹

To illuminate the vital role SPS plays, this Essay explains and predicts in four parts. Part I describes the basics of international SPS rules, Chapter 9 of the USMCA, and the challenges they pose to American positions.⁵² The challenges are weak mandates and deference to México. Part II summarizes claims that the *Decree* has excessive commercial impacts and unnecessary protections.⁵³ Focused on inconsistency, Part III presents arguments that the ban is not based on international food safety standards and is not based on scientific principles.⁵⁴ Part IV discusses transparency and risks.⁵⁵ In each part, the Essay predicts where American arguments are weakest in light of international SPS doctrine. A Conclusion emphasizes that these obstacles should encourage the United States to seek a resolution in this dispute.

⁵⁰ For a basic description of the USMCA dispute process, panel, and their role in resolution, see NINA M. HART, CONG. RSCH. SERV., IF11399, ENFORCING INTERNATIONAL TRADE OBLIGATIONS IN USMCA: THE STATE-STATE DISPUTE SETTLEMENT MECHANISM (2020).

⁵¹ This summarizes the legal powers of dispute panels and how disputes can be resolved. There is no appellate or judicial body after a panel issues its final report. For descriptions of these state-to-state dispute procedures, see DAVID A. GANTZ, AN INTRODUCTION TO THE UNITED STATES-MEXICO-CANADA AGREEMENT 59–69 (2020); David A. Gantz, *The United States-Mexico-Canada Agreement: Settlement of Disputes*, BAKER INST. (May 2, 2019), <https://www.bakerinstitute.org/research/united-states-mexico-canada-agreement-settlement-disputes> [https://perma.cc/Y6WQ-RRUK].

⁵² The focus is on challenges in the law, emphasizing the USMCA obligations and SPS doctrine. This does not refer to what factual claims or evidence the parties raise. The United States and México make extensive factual arguments. The United States' initial submission's statement of facts is twenty-four pages. See U.S. INITIAL WRITTEN SUBMISSION, *infra* note 58. This submission refers to over 130 exhibits. *Id.* In its initial reply, México provides a factual section sixty-six pages long and lists over 350 exhibits. See MÉXICO'S INITIAL REPLY SUBMISSION, *supra* note 29.

⁵³ This paraphrases Article 9.6.10 regarding measures that are “more trade restrictive than required” and Article 9.6.6(a) ensuring measures are “applied only to the extent necessary.” USMCA, *supra* note 4.

⁵⁴ This paraphrases Articles 9.6.3 and 9.6.6(b). See *id.*

⁵⁵ This paraphrases Article 9.6.7. See *id.*; Panel Request, *supra* note 21.

I. ARGUMENTS FOCUSED ON SPS (EXCEPTIONS TO FREE TRADE)

A. *Basics of the Dispute and SPS Rules*

Officially the GMO corn dispute is titled “*Mexico – Measures Concerning Genetically Engineered Corn (MX-USA-2023-31-01)*.”⁵⁶ México is listed first since it answers complaints, as the responding party, that its actions are inconsistent with the USMCA.⁵⁷ The United States is the complaining party⁵⁸ and Canada is a third party, siding with American reasons for invoking a panel. This classification refers to the year that the panel was formed, the USMCA dispute chapter, and the number of the controversy, respectively “2023-31-01.”⁵⁹ Most arguments in this dispute focus on Chapter 9 and SPS measures.⁶⁰ The chapter functions as an exception to the market access guaranteed in the USMCA for other goods and services.

These carve outs apply to SPS measures, defined as “protect[ing] human, animal, or plant life or health.”⁶¹ Chapter 9 states that parties have the right to adopt these measures, provided that they are “not inconsistent with” chapter provisions.⁶² The chapter applies to “all sanitary and phytosanitary measures of a Party that may, directly or indirectly, affect trade between the Parties.”⁶³ Its provisions set the parameters for how the three parties agreed SPS measures will be permitted and developed. This is overwhelmingly aspirational, focusing on relationships between the three. Chapter objectives include: to “strengthen communication,”⁶⁴ “enhance transparency . . . and understanding,”⁶⁵

⁵⁶ See Chapter 31 (*Dispute Settlement*) *Disputes*, *supra* note 45. In Spanish, this is “*México - Medidas relacionadas con el maíz genéticamente modificado*.”

⁵⁷ See *id.*

⁵⁸ See *id.* For the United States’ initial submission, totaling over ninety pages, see UNITED STATES OF AMERICA, MX-USA-2023-31-01, MEXICO – MEASURES CONCERNING GENETICALLY ENGINEERED CORN, INITIAL WRITTEN SUBMISSION OF THE UNITED STATES OF AMERICA (2023) (Oct. 25, 2023, public version released Nov. 17, 2023) [hereinafter U.S. INITIAL WRITTEN SUBMISSION], <https://www.iatp.org/documents/initial-written-submission-us-mexicos-measures-concerning-gm-corn> [<https://perma.cc/G94W-E5ZE>].

⁵⁹ See U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58.

⁶⁰ See Panel Request, *supra* note 21. The United States also argues that the *Decree* violates Article 2.11, from Chapter 2 National Treatment and Market Access for Goods, because this measure is inconsistent with Article 9.6. *Id.* at 2. The treaty provides that SPS measures that conform with Chapter 9 are presumed to be consistent with Chapter 2. See USMCA, *supra* note 4, art. 9.4.2.

⁶¹ USMCA, *supra* note 4, art. 9.3.1(a).

⁶² *Id.* art. 9.6.2. The SPS Agreement affirms a similar right in Article 2.1. See SPS Agreement, *supra* note 25.

⁶³ USMCA, *supra* note 4, art. 9.2.

⁶⁴ *Id.* art. 9.3.1(c).

⁶⁵ *Id.* art. 9.3.1(e).

“encourage . . . science-based international standards,”⁶⁶ and “advance science-based decision making.”⁶⁷ They look forward and point to an ideal understanding. Most chapter provisions are not concrete rights that the USMCA affords to the United States, its exporters, the two other parties, or their exporters. Instead, Chapter 9 sets the stage for what is expected of SPS measures that México, the United States, and Canada enact.

For many reasons, WTO SPS doctrine provides the best indication of how the USMCA GMO corn panel will rule. The USMCA builds on this doctrine, specifically the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).⁶⁸ WTO SPS doctrine is well-developed, addressing trade disputes for nearly three decades. As described below, for SPS matters, WTO rules and USMCA rules are identical, or nearly identical, regarding the legal arguments directed at the *Decree*. Moreover, there is no prior jurisprudence involving the USMCA and SPS matters. A ban on GMO corn in human food provides the first dispute examining Chapter 9.

More importantly, Chapter 9 incorporates a great deal of the SPS Agreement. Its objectives include to “reinforce and build upon the SPS Agreement” plus it expressly affirms rights and obligations from the SPS Agreement.⁶⁹ It refers to SPS Agreement definitions.⁷⁰ Chapter 9 continues basic principles from the SPS Agreement. One is that a party has the right to implement SPS measures.⁷¹ Also, complaining parties have the burden of proof to show inconsistency with treaty obligations by the party adopting the measure.⁷² Lastly, SPS measures must have a scientific basis.⁷³ The SPS Agreement requires measures be: “based on scientific principles,” supported by scientific evidence,⁷⁴ and based on a risk assessment.⁷⁵

The USMCA continues the SPS Agreement’s encouragement and incentivization that measures be based on international standards.⁷⁶ More specifically, both agreements explain that parties benefit from common SPS measures that are based on international standards or guidelines or

⁶⁶ *Id.* art. 9.3.1(f).

⁶⁷ *Id.* art. 9.3.1(h).

⁶⁸ *See id.* art. 9.3.1(b).

⁶⁹ *Id.* art. 9.3.1(b), 9.4.1.

⁷⁰ *See id.* art. 9.1.1.

⁷¹ *Id.* art. 9.6.2

⁷² *See* VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1030.

⁷³ *Id.* at 1029.

⁷⁴ SPS Agreement, *supra* note 25, art. 2.2.

⁷⁵ *See id.* art. 5.1.

⁷⁶ *See* Markus Wagner, *SPS: international standards*, in TRADE AND ENVIRONMENTAL LAW 333, 334 (Panagiotis Delimatsis & Leonie Reins eds. 2021) [hereinafter Wagner, *SPS: international standards*].

recommendations from relevant international organizations.⁷⁷ For the sake of brevity, this Essay refers to the three as “international standards.” Regarding food safety, the international organization is the Codex Alimentarius Commission (Codex) “relating to food additives, . . . pesticide residues, contaminants, [and] methods of analysis.”⁷⁸ It is comprised of participation from two United Nations organizations: the Food and Agriculture Organization (FAO) and the World Health Organization (WHO).⁷⁹ Standards, guidelines, and recommendations are non-binding when prepared and enacted by the Codex but become “quasi-mandatory” for WTO members by the SPS Agreement.⁸⁰ With a similar structure and language to this WTO agreement, Chapter 9 continues encouraging measures based on international standards.

B. *Obstacles from SPS Doctrine: Weak Mandates and Deference to México*

American positions face serious legal obstacles from SPS doctrine developed in WTO disputes and incorporated by Chapter 9. Challenging México’s *Decree* on GMO corn, the United States’ arguments focus on Article 9.6. This article seeks to ensure that SPS measures are crafted within expected parameters.

Article 9.6 provisions and SPS doctrine point to two kinds of stumbling blocks for American claims: weak obligations and deference to Mexican perspectives. Specifically, Chapter 9 does not mandate compliance and defers to México’s determinations on food safety. The chapter and Article 9.6 only pose lax requirements.⁸¹ They often do not require conformity. For instance, Article 9.6 only requires that SPS measures be “based on” international standards.⁸² It also requires that they be “based on” scientific principles.⁸³ And it only mandates “tak[ing]

⁷⁷ See SPS Agreement, *supra* note 25, pmb., arts. 3.1–3.5; USMCA, *supra* note 4, art. 9.6.3.

⁷⁸ SPS Agreement, *supra* note 25, Annex A, § 3(a); see USMCA, *supra* note 4, art. 9.1.2.

⁷⁹ See Neal D. Fortin, *Global governance of food safety: the role of the FAO, WHO, and Codex Alimentarius in regulatory harmonization*, in RESEARCH HANDBOOK ON INTERNATIONAL FOOD LAW 227, 232–38 (Michael T. Roberts ed., 2023) (describing how the Codex operates and its objectives).

⁸⁰ See Wagner, *SPS: international standards*, *supra* note 76, at 335; see also Lin, *supra* note 24, at 247.

⁸¹ Article 9.6.7 requires “an opportunity to comment,” but does not require comment. See USMCA, *supra* note 4, art. 9.6.7. Article 9.6.9 requires considering no measure as an option, but it does not require no measure. See *id.* art. 9.6.9.

⁸² *Id.* art. 9.6.3. In many places, Chapter 9 does not mandate conformity. See, e.g., *id.* art. 9.6.3 (requiring parties “base” measures on international standards or on risk assessment); *id.* art. 9.6.6(b) (requiring measures be “based on” scientific principles).

⁸³ *Id.* art. 9.6.1.

into account” scientific evidence.⁸⁴ These relaxed requisites effectively only ask México to consider; there is no mandate to conform or to follow international standards or scientific principles. Similarly, there is no obligation to follow or to incorporate scientific evidence. Put simply, Chapter 9 often only calls for México to regard or take note of standards, principles, and evidence. This is entirely different than obligating México to comply, conform, or follow.

American positions are most likely shortsighted, since they overstate what the trade pact requires. They paint Chapter 9 as a series of obligations and mandates, especially in the relationship between food safety measures and international standards and between food safety measures and scientific principles. The trade pact does something very different. Article 9.6 demands far less, evident in the wording of its provisions and established SPS doctrine.

Chapter 9 poses another obstacle for American arguments: México determines the level of food safety protection, and the panel will defer to this determination. In various provisions, the chapter affirms that México sets its ALOP.⁸⁵ ALOP is “[t]he level of protection deemed appropriate by” the party “establishing a[n SPS] measure to protect human . . . or plant life or health within its territory.”⁸⁶ ALOP is often referred to as the “acceptable level of risk.”⁸⁷ In terms of GMO corn, México established a measure, the *Decree*, to protect humans and plants inside Mexican territory.⁸⁸ This is done by banning GMO corn for human consumption, whether the corn is produced domestically or overseas.⁸⁹

The dispute panel will incorporate Mexican determinations when evaluating if the *Decree* is inconsistent with Article 9.6. This deference extended to the ALOP is generous.⁹⁰ SPS doctrine regards ALOP as a prerogative for parties when they enact SPS measures.⁹¹ So much so that

⁸⁴ *Id.* art. 9.6.8. For conducting risk assessment and risk management, *see id.* (requiring a party “takes into account” available scientific evidence and relevant guidance).

⁸⁵ *Id.* arts. 9.6.3, 9.6.4(a) (affirming that the SPS Agreement and Chapter 9 do “not prevent” a party from “establishing the level of protection it determines to be appropriate”); *see id.* art. 9.7.1 (recognizing enhanced “compatibility” of SPS measures “while maintaining each Party’s right to determine its” ALOP); *id.* art. 9.7.2 (confirming that pursuing enhanced compatibility shall not reduce each party’s ALOP).

⁸⁶ SPS Agreement, *supra* note 25, Annex A, § 5.

⁸⁷ PETROS C. MAVROIDIS, *THE REGULATION OF INTERNATIONAL TRADE, VOLUME 2: THE WTO AGREEMENTS ON TRADE IN GOODS* 478 (2016).

⁸⁸ *See* Comunicado, Secretaría de Economía, *supra* note 8.

⁸⁹ *See id.*

⁹⁰ *See* MAVROIDIS, *supra* note 87, at 479.

⁹¹ *See* Appellate Body Report, *Australia—Measures Affecting Importation of Salmon*, ¶ 199, WTO Doc. WT/DS18/AB/R (adopted Nov. 6, 1998) [hereinafter *Australia—Salmon*]; Appellate Body Report, *United States—Continued Suspension of Obligations in the EC—Hormones Dispute*, ¶ 523, WTO Doc. WT/DS320/AB/R (adopted Nov. 14, 2008) [hereinafter *U.S.—Continued*

once the existence of a risk is established, a party can choose its own level of protection as “zero risk.”⁹²

Specific to the United States’ arguments, México’s ALOP qualifies many Article 9.6 requirements regarding international standards,⁹³ trade restriction,⁹⁴ and risk management.⁹⁵ This means that the panel will defer to Mexican determinations about human safety and eating GMO corn as it evaluates the *Decree*. In more concrete terms, a panel will first identify Mexican positions on food safety and GMO corn, and then assess any inconsistency with Article 9.6. México’s ALOP will be the basis to then review if the *Decree* is based on international standards, if it decreases too much trade, and how México manages risks.

Article 9.6 mandates deference to México’s ALOP.⁹⁶ Mexican, not American nor international, determinations on food safety will be used to examine the ban’s relation to standards, its impact on exports, and how to manage health risks. Put simply, ALOP, a central feature of Chapter 9 and SPS doctrine, poses significant difficulties for American claims.

In conclusion, there are two kinds of legal hurdles in the USMCA: weak mandates and deference to ALOP. They point to what the USMCA actually requires. Contrary to popular assumptions, Chapter 9 is not a series of obligations to comply with determinations from the United States or international organizations.

Next this Essay describes core arguments, focused on Article 9.6, that the *Decree* is inconsistent with the USMCA. Then it points to the specific difficulties in winning these claims. Six American arguments are grouped into three parts. They address excessiveness for commerce and health protections; inconsistency with recommended international standards and science; and risk evaluation.

Suspension Hormones (2008)]; see also MAVROIDIS, *supra* note 87, at 479 (explaining dispute panels do not decide the level of risk but that a government, that enacts an SPS measure, does); *id.* at 478 (describing this “wide discretion” as “unambiguous”).

⁹² See *Australia–Salmon*, *supra* note 91, ¶ 125; MAVROIDIS, *supra* note 87, at 479–80. ALOP does not need to be expressed in a document and does not need to be expressed in quantitative terms. MAVROIDIS, *supra* note 87, at 479. It just needs to be “expressed in clear enough terms.” *Id.*

⁹³ See USMCA, *supra* note 4, art. 9.6.3 (requiring that measures be “based” on international standards “provided that doing so meets” the ALOP determined by the party instituting the measure).

⁹⁴ See *id.* art. 9.6.10 (using ALOP to determine if a measure is “more trade restrictive than required” and if “another option” is suitable).

⁹⁵ See *id.* art. 9.6.9 (suggesting “no measure” as a risk management option “if that would achieve” the ALOP).

⁹⁶ See *id.* art. 9.6.3 (requiring international standards so long as doing so meets ALOP); *id.* art. 9.6.4 (recognizing Chapter 9 and the SPS Agreement do not prevent establishing ALOP).

II. COMMERCE AND HEALTH: EXCESSIVE IMPACTS AND PROTECTIONS

A. *Hurts Exports: “More trade restrictive than required”*

The first American argument focuses on the commercial impacts of banning GMO corn for human consumption. In terms of trade rules, the United States claims that the *Decree* is more trade restrictive than required, referring to Article 9.6.10.⁹⁷ In essence, the assertion is that a food safety measure has excessive negative consequences to trade, meaning the ban results in too much of a decrease in GMO corn imports from the United States.

Article 9.6.10 poses two hurdles to win this argument regarding how a trade restriction is measured and how it is defined.⁹⁸ México greatly influences how the restraint on commerce is measured. The article prohibits trade restrictions if they are excessive in relation to the SPS protection needed.⁹⁹ It describes this as “the level of protection that the Party has determined to be appropriate,” i.e. ALOP.¹⁰⁰ Importantly, México sets this level of protection for human health that it finds appropriate. Based on this, México enacts a measure that bans one type of corn for human consumption. The measure in question is the *Decree* that only impacts corn for *masa* or tortillas and does not impact corn in animal feed or industrial use.¹⁰¹

Then, relative to this degree of protection, commercial consequences are examined. Article 9.6.10 does not allow for the United States to argue that there are excessive trade restrictions based on the kind of protection to human health that it wants. Instead, Mexican concerns for human health frame the legal analysis. The initial focus of the examination is not on the commercial consequences. The starting point of analysis is a Mexican determination, i.e. ALOP.

Furthermore, Article 9.6.10 specifically defines what is “more trade restrictive than required.”¹⁰² It says that to be “more trade restrictive than required” there needs to be an alternative measure available that does three things: achieve the same ALOP, be reasonably available, and restrict less trade.¹⁰³ Put more simply, for a panel to find there is too much

⁹⁷ See Panel Request, *supra* note 21, at 2; U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 60–61.

⁹⁸ See USMCA, *supra* note 4, art. 9.6.10.

⁹⁹ See *id.*

¹⁰⁰ See *id.*

¹⁰¹ See Comunicado, Secretaría de Economía, *supra* note 8.

¹⁰² See USMCA, *supra* note 4, art. 9.6.10.

¹⁰³ *Id.*

trade restriction because of the *Decree* it must find an alternative is viable, and it provides the same food safety benefits.

International SPS doctrine confirms this three-part test in multiple disputes. For an SPS measure to be “more trade restrictive than required” the alternative must: result in “significantly less” restriction; be reasonable given technical and economic feasibility; and achieve the ALOP. For over two decades, international trade panels have ruled that an alternative to the existing SPS measure must meet all three factors.¹⁰⁴ Looking at trade restrictions and food safety measures, SPS Agreement and USMCA requirements are similar.¹⁰⁵

This creates enormous legal obstacles. For the United States to win this argument, an alternative to the *Decree* must exist. This alternative must do three things: achieve the same level of protection as banning GMO corn in human food; be reasonably available in technical and economic terms; and result in much less trade restriction. In sum, it is doubtful that the United States can win this argument by simply pointing to how the *Decree* leads to less imports of GMO corn.

B. *Not Needed: Beyond the “Extent Necessary”*

Second, the United States argues that there is no need for the *Decree*. It points to Article 9.6.6(a), which requires SPS measures should be “applied only to the extent necessary to protect” human life or health.¹⁰⁶ Here, presumably, the American claim rests on GMOs being safe to human health and banning them is not needed.

To win this, the United States must overcome the ban’s limited scope.¹⁰⁷ The *Decree* only applies to GMO corn in *masa* or tortillas.¹⁰⁸ The ban does not touch GMO corn in animal feed or used for industrial applications. Since the prohibition impacts a minute part of corn imports, the United States will have to prove there is no food safety benefit from the measure.

¹⁰⁴ For this three-part test, see *Australia–Salmon*, *supra* note 91, ¶ 194; Appellate Body Report, *Japan–Measures Affecting Agricultural Products*, ¶ 95, WTO Doc. WT/DS76/AB/R (adopted Feb. 22, 1999); Appellate Body Report, *Korea–Import Bans, and Testing and Certification Requirements for Radionuclides*, ¶ 5.21, WTO Doc. WT/DS495/AB/R (adopted Apr. 11, 2019).

¹⁰⁵ USMCA Article 9.6.10 and SPS Agreement Article 5.6 both stipulate that measures not be more trade restrictive than required. See USMCA, *supra* note 4, art. 9.6.10; SPS Agreement, *supra* note 25, art. 5.6.

¹⁰⁶ See Panel Request, *supra* note 21, at 2; U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 52–56.

¹⁰⁷ Alessandra Guida argues that trade panels should do a proportional analysis for this “necessity test,” especially for trade in biotechnology, see Alessandra Guida, *The Reasoning Structure in Legal Disputes on the International Trade of Biotechnology: From a Judicial Balance by Chance to a Judicial Balance by Design*, 12 EUR. J. RISK REGUL. 602, 602 (2021).

¹⁰⁸ See *Decree*, *supra* note 8.

III. RECOMMENDATIONS: INCONSISTENT WITH STANDARDS AND SCIENCE

A. *Not “Based on International Standards” for Food Safety*

For its third argument, the United States emphasizes recommendations from international organizations. Specifically, the claim is that the *Decree* is not based on international food standards, as required in Article 9.6.3.¹⁰⁹ These claims receive the largest part of attention in the United States’ first submission to the panel.¹¹⁰ Article 9.6.3 requires¹¹¹ measures be based on international standards.¹¹² The United States bears the burden of proving México did not base its *Decree* on these standards.¹¹³

These claims face two important obstacles regarding the standards themselves and their weakened role in international SPS doctrine. In particular, international standards do not offer a definite position on banning the consumption of GMO food items. Plus, international standards are not binding or mandatory since they merely suggest what governments can do. This norm is confirmed by decades of SPS disputes in the WTO.¹¹⁴

1. The Standards are Vague and Outdated.

Chapter 9 explains that the Codex provides standards for food safety.¹¹⁵ The Codex does not offer clear standards for evaluating measures addressing human safety specific to consuming GMO corn. It

¹⁰⁹ See Panel Request, *supra* note 21, at 1–2; U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 40–52.

¹¹⁰ This is twelve out of forty pages of legal discussion. See U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 40–52.

¹¹¹ For the sake of brevity, this paraphrases what Article 9.6.3 requires. Technically, it requires two things for an SPS measure to be based on international standards or, in the alternative, to be “based on a risk assessment.” The United States also argues the *Decree* lacks a risk assessment, an independent requirement from Article 9.6.8. See *infra* Section IV.B.

¹¹² USMCA, *supra* note 4, art. 9.6.3.

¹¹³ See *cf.* VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1038 (identifying the complaining party as with the burden); Appellate Body Report, *EC Measures Concerning Meat and Meat Products (Hormones)*, ¶ 171, WTO Doc. WT/DS26/AB/R, WT/DS48/AB/R (adopted Jan. 16, 1998) (finding a complaining party has the “normal burden of showing a *prima facie* case of inconsistency”) [hereinafter *EC–Hormones* (1998)].

¹¹⁴ MAVROIDIS, *supra* note 87, at 468–69; Appellate Body Report, *European Communities–Trade Description of Sardines*, ¶ 242, WTO Doc. WT/DS231/AB/R, (adopted Sept. 26, 2002) [hereinafter *European Communities–Sardines*]; *EC–Hormones* (1998), *supra* note 113, ¶ 166.

¹¹⁵ USMCA, *supra* note 4, art. 9.1.2 (citing SPS Agreement Annex A, § 3(a)–(c)).

suggests even less guidance for glyphosate, pointing to positions on the chemical in crops from 2006 or earlier.¹¹⁶ The Codex has been criticized as subject to excessive input from the food industry and to non-scientific influence.¹¹⁷

The Codex vacillates between affirming that governments are free to develop their own GMO regulations and pointing to its non-binding general guidance. Answering “does Codex develop standards for GMOs?,” it sides with national control.¹¹⁸ It explains that governments are “free to adopt [their] own policies” and “own regulations,” plus “there are no internationally-agreed recommendations” on GMO labelling.¹¹⁹ But the Codex also points to the utility of its general suggestions. Governments “can use” its standards as a “basis” to develop food safety regulations.¹²⁰ This includes “principles and guidelines to assess food safety.”¹²¹ In sum, the Codex does not provide clear and definite statements on the safety of consuming GMOs or on banning this consumption. Instead, it suggests how to evaluate food safety.

Accordingly, the United States raises Codex standards on risk analysis and on food safety assessments. They offer general suggestions for evaluating food derived from biotechnology¹²² and from recombinant-DNA plants,¹²³ respectively.

These standards are outdated for this dispute. The Codex states its latest modification for its standard for food derived from biotechnology was in 2011 and in 2008 for food derived from recombinant-DNA

¹¹⁶ Codex guidance on glyphosate says three things: in 2015 the International Agency for Research on Cancer (IARC) classified glyphosate as a probable human carcinogen “with strong evidence for a genotoxic mechanism of carcinogenicity;” in 2004, a WHO/FAO Expert Meeting “did not find evidence for carcinogenicity;” and the Codex has established residue limits for glyphosate in crops. *What is the Codex position on Glyphosate?*, CODEX ALIMENTARIUS, <https://www.fao.org/fao-who-codexalimentarius/about-codex/faq/faq-detail/en/c/454783> [https://perma.cc/782N-VGEF]. For IARC findings, see Kathryn Z. Guyton et al., *Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon, and glyphosate*, 16 THE LANCET: ONCOLOGY 490 (2014).

¹¹⁷ See generally Kuei-Jung Ni, *Does Science Speak Clearly and Fairly in Trade and Food Safety Disputes? The Search for an Optimal Response of WTO Adjudication to Problematic International Standard-Making*, 68 FOOD & DRUG L. J. 97 (2013).

¹¹⁸ *Does Codex develop standards for GMOs?*, CODEX ALIMENTARIUS, <https://www.fao.org/fao-who-codexalimentarius/about-codex/faq/faq-detail/en/c/454784> [https://perma.cc/3X9Z-N9EV].

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² The United States refers to *Principles for the Risk Analysis of Foods Derived from Modern Biotechnology* [hereinafter *Principles*]. See U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 43 n.195.

¹²³ *Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants* [hereinafter *Guideline*]. See *id.* at n.202. This standard is presumably the Codex “Guideline” not “Guidelines,” *id.* at xviii.

plants.¹²⁴ Significant for the *Decree*, both standards predate findings from a WHO agency in 2015 that glyphosate is a likely cause of cancer.¹²⁵ They precede a series of rulings by American courts, finding glyphosate is likely to cause cancer.¹²⁶ The judgements continue—nine years later.¹²⁷

These standards, cited by the United States, offer basic suggestions. They emphasize comparing food from GMO and non-GMO plants.¹²⁸ Risk assessment should obtain information from a “variety of sources” not limited to regulatory agencies or the developer of the food item.¹²⁹ Such assessments should look at “all available scientific data and information” provided they are from “scientifically sound procedures.”¹³⁰ This includes “potential accumulation of pesticide residues,”¹³¹ something important given the *Decree* addresses food safety risk from glyphosate.¹³²

Standards raised by the United States may actually favor the *Decree*. They suggest that information in risk assessment should come not just from American sources or from GMO seed producers. There is ample space to refer to scientific studies finding GMO corn or glyphosate are not safe.¹³³ In short, the Codex standards on their own do not suggest that

¹²⁴ These two standards have the Codex reference numbers: CXG 44-2003 for the *Principles* and CXG 45-2003 for the *Guideline*. See *Related Codex Texts*, CODEX ALIMENTARIUS, <https://www.fao.org/fao-who-codexalimentarius/thematic-areas/biotechnology/en> [<https://perma.cc/9HKP-EEZ8>].

¹²⁵ For a description of findings from the IARC (a WHO agency), see Kathryn Z. Guyton et al., *supra* note 116.

¹²⁶ These rulings have looked to the IARC findings. See Rene Ebersole, *Monsanto Just Lost a Case Linking Its Weed Killer to Cancer*, THE NATION (Aug. 17, 2018), <https://www.thenation.com/article/archive/monsanto-just-lost-a-case-linking-its-weedkiller-to-cancer> [<https://perma.cc/7NJV-N3Z2>]; Zenebou Sylla & Elizabeth Wolfe, *Bayer ordered to pay \$2.25 billion after jury concludes Roundup weed killer caused a man’s cancer, attorneys say*, CNN (Jan. 30, 2024), <https://www.cnn.com/2024/01/29/us/roundup-cancer-verdict-philadelphia-bayer-monsanto/index.html> [<https://perma.cc/47JC-CXNB>].

¹²⁷ See Brendan Pierson, *US appeals court finds Bayer not shielded from Roundup lawsuit*, REUTERS (Feb. 5, 2024), <https://www.reuters.com/legal/us-appeals-court-finds-bayer-not-shielded-roundup-lawsuits-2024-02-05> (last visited Apr. 6, 2024); Maryclaire Dale, *Bayer fights string of Roundup trial losses including \$2.25B verdict in Philadelphia*, AP NEWS (Feb. 14, 2024), <https://apnews.com/article/weed-killer-roundup-philadelphia-verdict-cancer-6c777d7fd4e7c38ec8fe28a6f1566d24> [<https://perma.cc/L2NK-3VUH>].

¹²⁸ See U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 43 (stating the *Principles* suggest “comparison” on “case-by-case basis” for particular products).

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.* at 44 n.204.

¹³² See *Decree*, *supra* note 8, at pmb., arts. I, III, IV, and V. For description of policies addressing these risks, see *Wise*, *supra* note 14.

¹³³ See, e.g., Elena R. Álvarez-Buylla & Alma Piñeyro Nelson EL MAÍZ EN PELIGRO ANTE LOS TRANSGÉNICOS (2013); Mariana Ayala-Angulo et al., *Local and Regional Dynamics of Native Maize Seed Lot Use by Small-Scale Producers and Their Impact on Transgene Presence in Three*

the *Decree* is not based on the source collection or methods indicated in assessing biotechnology or recombinant-DNA plants.

2. Conformity with the Standards is Not Required.

Next, SPS doctrine is clear in determining that international standards are not binding on parties when they develop SPS measures. This comes from a series of international disputes on food safety, examining WTO obligations that are nearly identical to their counterparts in the USMCA.¹³⁴ Both, SPS Agreement Article 3.1 and USMCA Article 9.6.3, require parties “shall base” SPS measures on international standards.¹³⁵ The only difference between the two articles actually favors the *Decree* and México. The USMCA indicates that ALOP limits the relevancy of any international standard.¹³⁶ Because of this, the level of food safety determined by México then sets the stage for deciding what international standards are relevant.

International standards are not binding when parties establish an SPS measure.¹³⁷ A requirement that measures be “based on” international standards does not require conformity.¹³⁸ The SPS Agreement does not make non-binding Codex standards binding.¹³⁹ The same is true for Chapter 9 of the USMCA because it affirms rights and obligations from the SPS Agreement, belonging to México, the United States, and Canada.¹⁴⁰

In conclusion, it will not be easy to prove the *Decree* is inconsistent with Article 9.6.3 for two reasons. The international standards themselves are problematic, being vague on the safety of GMOs, at times outdated, and at best only providing guidance on how to test food safety. Next,

Mexican States, 12 PLANTS 2514 (2023); Michael N. Antoniou et al., *Agricultural GMOs and their associated pesticides: misinformation, science, and evidence*, 35 ENV'T SCIENCES EUR. 5, Sept. 13, 2023; *supra* notes 124–125.

¹³⁴ *European Communities–Sardines*, *supra* note 114, ¶ 242 (citing *EC–Hormones* (1998)); see also MAVROIDIS, *supra* note 87, at 468–69 (examining these rulings).

¹³⁵ SPS Agreement, *supra* note 25, art. 3.1; USMCA, *supra* note 4, art. 9.6.3.

¹³⁶ USMCA, *supra* note 4, art. 9.6.3 (requiring SPS measures based on international standards “provided that doing so meets” ALOP).

¹³⁷ *EC–Hormones* (1998), *supra* note 113, ¶ 165 (saying there is “no indication of any intent” in the agreement to make international standards binding).

¹³⁸ *European Communities–Sardines*, *supra* note 114, ¶ 242, (citing *EC–Hormones* (1998), ¶ 166); see also Wagner, *The Future of Sanitary and Phytosanitary Governance: SPS-Plus or SPS-Minus?*, *supra* note 26, at 453; Wagner, *SPS: international standards*, *supra* 76, at 333 (summarizing the rulings that requirements to base a measure on international standards do not require conformity); MAVROIDIS, *supra* note 87, at 468–69.

¹³⁹ See VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1036–40; Lin, *supra* note 26, at 247.

¹⁴⁰ See USMCA, *supra* note 4, art. 9.4.1; see also *id.* art. 9.3.1(b) (stating Chapter 9 objectives are to “reinforce” the SPS Agreement).

international trade doctrine confirms that SPS measures should be based on Codex standards. This does not mean conforming to any international standards or that these standards are binding by virtue of a trade agreement.

B. Not “Based on Scientific Principles”

Fourth, the United States avers that the ban is out of step with science. This refers to Article 9.6.6(b) which requires food safety measures be “based on relevant scientific principles.”¹⁴¹ For this, the United States emphasizes that the *Decree* is not based on scientific principles, explaining that the measure is not based in international standards or not based on a risk assessment.¹⁴² The United States does not raise specific scientific principles that the *Decree* must be related to. Instead, the implication is that inconsistency with Articles 9.6.3 for standards and 9.6.8 for risk assessment are enough to find no basis in scientific principles.

This conflation does not make sense and, if anything, is wrong. Scientific principles, international standards, and risk assessment are quite distinct from each other. They require different things and seek different objectives. They are either law or rules for science, guidance from an international organization, or an identification and evaluation of risks that the SPS measure addresses, respectively.

IV. ADDRESSING RISKS: NO EVALUATION AND NO TRANSPARENCY

A. Plans for Risks: no “Risk Assessment and Risk Management”

The United States’ fifth argument regards risks, more precisely how they are identified and managed, referring to subsection 8 of Article 9.6.¹⁴³ It requires two separate things when enacting an SPS measure, to conduct: risk assessment and risk management.¹⁴⁴ “Risk assessment” examines scientific and potentially economic adversities created by a

¹⁴¹ See Panel Request, *supra* note 21, at 2; U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 56–57.

¹⁴² See U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 56–57.

¹⁴³ See Panel Request, *supra* note 21, at 2; U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 59–60.

¹⁴⁴ See USMCA, *supra* note 4, art. 9.6.8.

food safety measure.¹⁴⁵ Relevant to GMO corn, this includes contaminants and toxins or disease-causing organisms in food.¹⁴⁶ “Risk management” refers to policy choices after the risk assessment.¹⁴⁷ Risk assessment is more scientific, more economic, and unconcerned with policies. Importantly and more policy-focused, risk management opens the door for societal values or consumers’ preferences supporting the *Decree*.¹⁴⁸ Risk management is a recent innovation in SPS obligations, pushed by the United States in its negotiations over the failed Trans-Pacific Partnership Agreement and included in the USMCA.¹⁴⁹

For a few reasons, it is unclear if the obligations in Article 9.6.8 relate to the ban. American arguments referring to these provisions are brief and not fully developed, barely two pages out of ninety-five in the United States’ initial submission.¹⁵⁰ Plus, the wording of Article 9.6.8 itself is vague. Its sub-parts require: (a) being “appropriate to the circumstances” and “tak[ing] into account the available relevant scientific evidence” and (b) considering “relevant guidance” from the WTO SPS Committee and international standards.¹⁵¹ It is not clear if risk assessment and risk management must meet the requirements of both sub-parts. Sub-part (a) only refers to “risk assessment” and not risk management. Presumably then, its requirements of appropriate circumstances and considering scientific evidence do not apply to risk management. This implies that México’s policy choice to outlaw GMO corn is not limited by what is appropriate and what scientific evidence takes into account.

Regardless, international SPS doctrine points to three clear difficulties American claims must overcome: that conformity with the assessment is not required, risk assessments for food safety are less strict, and risk assessments can rely on conclusions from a minority part of the scientific community.

¹⁴⁵ Chapter 9 does not define risk assessment. The SPS Agreement defines it as an evaluation of: the likelihood of disease within the territory where an SPS measure would apply; “associated potential biological and economic consequences;” or “potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food . . .” See SPS Agreement, *supra* note 25, Annex A, § 4.

¹⁴⁶ See *id.*

¹⁴⁷ Chapter 9 defines “risk management” as “the weighing of policy alternatives in light of the results of risk assessment and, if required, selecting and implementing appropriate controls, which may include sanitary or phytosanitary measures.” See USMCA, *supra* note 4, art. 9.1.2.

¹⁴⁸ See *c.f.* VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1040–41 (describing how risk management is focused less on the science of risk assessments and takes into account societal values, preferences from consumers, and industry interests).

¹⁴⁹ The WTO Appellate Body ruled that risk assessment and risk management were different, inspiring more clear inclusion of risk management in later trade agreements. See Kuei-Jung Ni, *Science and Risk Analysis in CPTPP/SPS-Plus: Role Model or Unbearable Burden*, 15 J. FOOD L. & POL’Y 22, 31–32 n.58 (2019).

¹⁵⁰ See U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 59–60.

¹⁵¹ USMCA, *supra* note 4, art. 9.6.8(a)–(b).

1. Conformity with Risk Assessment is Not Required.

The results of a risk assessment must only be loosely followed. Both the SPS Agreement and Article 9.6.8 do not require that an SPS measure conform with a risk assessment.¹⁵² For México, this means that there is no USMCA obligation that the *Decree* comply with the scientific identification and evaluation of what risks GMO corn poses. Both trade agreements state that measures must be “based” on risk assessment.¹⁵³ Mandates are to base and do not include anything more strict, such as to follow, conform, or comply.¹⁵⁴ In this light, SPS doctrine only requires measures to have “a rational relationship” with the risk assessment, and this assessment must “reasonably support” the measure.¹⁵⁵ In sum, it’s off-the-mark for American claims to presume the *Decree* must conform with any risk assessment.

2. For Food Safety, Risk Assessments are Less Demanding.

The next legal impediment is specific to food and risk assessments. In trade disputes about SPS measures, there are two types of risk assessments: risks from pests or diseases and risks from “food-borne risks.”¹⁵⁶ Risk assessments for food can be less demanding.

Risk assessments for food can show less of a relation between the risk and human health. In examining risks to human health from food, risk assessments establish the “potential” for adverse effects.¹⁵⁷ It is

¹⁵² See USMCA, *supra* note 4, art. 9.6.3 (stating measures shall “be based” on risk assessment); SPS Agreement, *supra* note 25, art. 5.1 (ensuring measures “are based on” an assessment of the risks).

¹⁵³ See USMCA, *supra* note 4, art. 9.6.3; SPS Agreement, *supra* note 25, art. 5.1.

¹⁵⁴ Chapter 9 provisions do not include anything more strict than to “base.” See *c.f.* USMCA, *supra* note 4, art. 9.6.4(b) (stating parties are not prevented from “establishing or maintaining an approval procedure that requires a risk assessment . . .”); *id.* art. 9.6.5(c) (requiring “review” and if needed, revision of provisional SPS measures “in light of the risk assessment”); *id.* art. 9.6.7 (describing the manner a party “shall conduct its risk assessment” with description limited to “documented” and with “opportunity to comment”); *id.* art. 9.6.8 (ensuring risk assessment is conducted “appropriate to the circumstances” and “takes into account” scientific evidence and relevant guidance).

¹⁵⁵ *EC–Hormones* (1998), *supra* note 113, ¶ 193. Mavroidis describes two facets of this rule. First, “based” means a “rational connection.” It requires that an assessment “reasonably support” the SPS measure. This means “some sort of congruence” between the measure and the assessment. Second, it requires that the ALOP be within the range of probable risks that the assessment identified. See MAVROIDIS, *supra* note 87, at 478.

¹⁵⁶ VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1041–42 (examining multiple WTO panel reports, including *EC–Hormones* (1998), *supra* note 113, ¶¶ 184–86); Lin, *supra* note 24, at 248; MAVROIDIS, *supra* note 87, at 473–74.

¹⁵⁷ *EC–Hormones* (1998), *supra* note 113, ¶¶ 184–86, 194; *U.S.–Continued Suspension Hormones* (2008), *supra* note 91, ¶ 569.

different for measures directed at pests or disease, which identify the “likelihood” of these effects.¹⁵⁸ “Potential” is a less strict standard than “likelihood.”¹⁵⁹ This norm is based on multiple WTO disputes.¹⁶⁰ For food safety measures, a requirement to establish potential risks is less demanding than establishing the likelihood of risks.

Rulings in SPS disputes make this clear distinction because risks directed at humans are a greater concern than risks from pests or disease.¹⁶¹ Thus, measures directed at risks from food can impose stricter requirements, compared to measures aimed at pests or disease.¹⁶² As such, for a government using a measure to protect what people eat, it must find less of a risk of danger compared to pests or disease. In sum, neither potential risks, nor the likelihood of risks, require certainty. Plus, Mexican positions on the *Decree* will be more convincing if health risks from GMO corn are identified as a potential occurrence.

3. Risk Assessments May Rely on Scientific Perspectives That Are the Minority.

Lastly, risk assessments may incorporate scientific positions that México will likely raise, even if American policy or international organizations disagree with these positions. Risk assessments may incorporate scientific opinions that are not the majority perspective.¹⁶³ Risk assessments are not bound to only follow scientific consensus. This is a problem for American and pro-GMO stances, which usually contend that GMOs are undoubtedly safe.¹⁶⁴ Decades of scientific studies establish the contrary: GMOs pose many risks.¹⁶⁵

Multiple rulings on the SPS Agreement confirm this openness, for where the information comes from and how it is produced. There is no requirement that the information “reflect the majority view within the scientific community,” so long as the view is from a respected and

¹⁵⁸ *Australia–Salmon*, *supra* note 91, ¶ 123.

¹⁵⁹ See VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1041–43.

¹⁶⁰ See *EC–Hormones* (1998), *supra* note 113, ¶ 194; *Australia–Salmon*, *supra* note 91, ¶ 123; *U.S.–Continued Suspension Hormones* (2008), *supra* note 91, ¶ 569.

¹⁶¹ See *Australia–Salmon*, *supra* note 91, ¶ 64.

¹⁶² VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1042–43.

¹⁶³ *EC–Hormones* (1998), *supra* note 113, ¶ 194.

¹⁶⁴ See *supra* note 12.

¹⁶⁵ See Antoniou et al., *supra* note 133, at 5; José Domingo, *Safety assessment of GM plants: An updated review of the scientific literature*, 95 FOOD. CHEM. TOXICOLOGY 12, 12–13 (2016); Angelika Hilbeck et al., *No Scientific Consensus on GMO Safety*, 27 ENV'TL. SCI. EUR. 2, 2–3 (2015); José Domingo & Jordi Giné Bordonaba, *A Literature Review on the Safety Assessment of Genetically Modified Plants*, 37 ENV. INT'L 734, 734–35 (2011).

qualified source and “considered to be legitimate science.”¹⁶⁶ The assessment does not need to quantify the risk.¹⁶⁷ In fact, quantitative methods can be “misleading” when reliable numeric data is not available.¹⁶⁸ The assessment can present risks in qualitative, i.e. not numeric, terms.¹⁶⁹ Chapter 9 of the USMCA affirms this.¹⁷⁰

In sum, these three points on Article 9.6.8 offer a warning for American positions: scientific research that GMO corn is unsafe should be taken seriously. The USMCA panel will. It won’t be easily convinced by claims of consensus or a need for numeric certainty. Moreover, México benefits from a lower threshold needed for any risk assessment on food safety, e.g. GMO corn in human consumption.

B. *Input from the United States: no “Opportunity” to “Comment” on Risk Assessment*

The United States’ sixth argument emphasizes transparency. It says México did not provide a chance for it to give input on these risks.¹⁷¹ Article 9.6.7 requires México to document its risk assessment and risk management and to provide an opportunity to comment.¹⁷² This opportunity must be available to the United States and Canada.

The United States will have to overcome the possibility that México already provided its risk assessment and an opportunity. Both sides have discussed these measures. A ban on GMO corn was no surprise to American officials when México issued the *Decree* in February of 2023.

American and Mexican officials met for years before to discuss GMO corn, banning it, and impacts to trade. In January 2021, México announced that it was banning all GMO corn for human consumption and this would take effect no later than January 31, 2024.¹⁷³ In 2023, the *Decree* rolled this back to just GMO corn for *masa* or tortillas, confirming

¹⁶⁶ *U.S.–Continued Suspension Hormones* (2008), *supra* note 91, ¶ 591.

¹⁶⁷ VAN DEN BOSSCHE & ZDOUC, *supra* note 23, at 1043.

¹⁶⁸ Panel Report, *Australia–Measures Affecting the Importation of Apples from New Zealand*, ¶ 7.441, WTO Doc. WT/DS367/R (adopted Dec. 17, 2010).

¹⁶⁹ *EC–Hormones* (1998), *supra* note 113, ¶ 186; *Australia–Salmon*, *supra* note 91, ¶¶ 124–25; *U.S.–Continued Suspension Hormones* (2008), *supra* note 91, ¶ 569.

¹⁷⁰ See USMCA, *supra* note 4, art. 9.6.8(a) (noting scientific evidence includes “qualitative and quantitative” information).

¹⁷¹ See Panel Request, *supra* note 21, at 2; U.S. INITIAL WRITTEN SUBMISSION, *supra* note 58, at 57–58.

¹⁷² See USMCA, *supra* note 4, art. 9.6.7.

¹⁷³ See FOREIGN AGRIC. SERV., MX2021-0003, MEXICO PUBLISHES DECREE TO BAN GLYPHOSATE AND GE CORN (2021), https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Mexico%20Publishes%20Decree%20to%20Ban%20Glyphosate%20and%20GE%20Corn_Mexico%20City_Mexico_01-06-2021 (last visited Apr. 6, 2024).

it did not apply to GMO corn in animal feed, corn for industrial use, or to other GMO foods or crops.¹⁷⁴ This was México's compromise, done after a series of meetings between American, Mexican, and Canadian officials in 2021 and 2022.¹⁷⁵ To win an Article 9.6.7 claim, the United States must prove that no risk assessment in documented form was done and that it did not have an opportunity to comment on this evaluation during meetings in 2021 and 2022.

CONCLUSION

The United States and México fight over a ban on GMO corn for human consumption. Popular anxieties accompany trade disputes and will bud as a panel proceeds into an election year in both countries. Supporters on both sides emphasize science. Proving that GMOs are clearly safe¹⁷⁶ or they are dangers to humans and biodiversity.¹⁷⁷ Both are misguided, if they expect determinations on science will resolve the dispute. Instead, the dispute panel will focus on trade rules and SPS requirements from USMCA Chapter 9.

This Essay describes American legal arguments and predicts obstacles they face. The United States' complaints fall into three categories. The *Decree* violates the trade pact because: its commercial impacts and protections are excessive,¹⁷⁸ it is inconsistent with food

¹⁷⁴ See Comunicado, Secretaría de Economía, *supra* note 8; CHINH, *supra* note 8.

¹⁷⁵ See Jennifer Whitlock, *North American trade representatives discuss USMCA*, TEXAS AGRIC. DAILY (May 21, 2021), <https://texasfarmbureau.org/north-american-trade-reps-discuss-usmca> [<https://perma.cc/83LF-X3MS>]; *Tai discusses agricultural, environmental concerns with Mexican officials*, INSIDE U.S. TRADE (July 7, 2021, 12:37 PM), <https://insidetrade.com/trade/tai-discusses-agricultural-environmental-concerns-mexican-officials> [<https://perma.cc/E5X2-UQZF>]; News Release, U.S. Department of Agriculture, Secretary Vilsack Statement on Trip to Mexico, Meetings with President López Obrador and Cabinet Officials (Nov. 28, 2022), <https://fas.usda.gov/newsroom/secretary-vilsack-statement-trip-mexico-meetings-president-lopez-obrador-and-cabinet> [<https://perma.cc/3ELP-S74J>]; *Mexico says it aims for agreement with U.S. on GM corn in January*, REUTERS (Dec. 16, 2022, 6:11 PM), <https://www.reuters.com/world/americas/mexico-says-it-aims-agreement-with-us-gm-corn-january-2022-12-16> (last visited Apr. 6, 2024).

¹⁷⁶ See *supra* note 12.

¹⁷⁷ For descriptions of the science México refers to, see Ernesto Hernández-López, *Mexico Brings Science to a Trade Fight Over GMO Corn*, COMMON DREAMS (Mar. 19, 2024), <https://www.commondreams.org/opinion/mexico-brings-science-to-a-trade-fight-over-gmo-corn> [<https://perma.cc/P6WE-AMNF>]; Timothy Wise, *Mexico defends GM corn restrictions with science*, INST. FOR AGRIC. & TRADE POL'Y (Mar. 14, 2024), <https://www.iatp.org/mexico-science-based-defense-gm-corn-restrictions> [<https://perma.cc/BV92-QWLL>].

¹⁷⁸ This paraphrases Article 9.6.10 and Article 9.6.6(a). See USMCA, *supra* note 4, arts. 9.6.10, 9.6.6(a).

standards and scientific principles,¹⁷⁹ and it mishandles risks to food safety.¹⁸⁰

But SPS rules pose two significant hurdles: weak mandates and deference to México's determinations. These norms are clear parts of international SPS doctrine on food safety, developed over decades.¹⁸¹ Chapter 9 incorporates them. First, the chapter requires that México "base" its food safety measures on various criteria, but it does not mandate México conform with this criteria.¹⁸² This severely lessens the strength of American claims on international standards, scientific principles, and handling risks. Similarly, México must "take into account" scientific evidence but is not required to incorporate it.¹⁸³ At most, México must consider standards, international recommendations, and evidence but is not required to abide by them. For SPS rules, USMCA obligations are lax despite what the United States avers.

Second, the trade pact defers to México for many Chapter 9 requirements. This regards México's determination of ALOP.¹⁸⁴ It will be used to evaluate *Decree* impacts on corn imports and the relevancy of international standards. The panel will first prioritize the level of food safety México chose. It will not focus just on trade restrictions or what international organizations recommend.

Decades of SPS disputes in the WTO confirm lax mandates and deference to ALOP. The USMCA incorporates these norms as part of SPS doctrine. It includes parallel, at times identical, obligations from the WTO's SPS Agreement. In Chapter 9, the United States, México, and Canada expressly affirmed their rights and obligations under these WTO rules and agreed that their SPS objectives are to reinforce them.¹⁸⁵

Given these obstacles, American officials and exporter interests should seek a resolution versus continuing a long dispute. Past experiences with beef hormone and biotech exports serve as clear

¹⁷⁹ This paraphrases Articles 9.6.3 and 9.6.6(b). *See id.* arts. 9.6.3, 9.6.6(b).

¹⁸⁰ This summarizes Articles 9.6.7 and 9.6.8. *See id.* arts. 9.6.7, 9.6.8.

¹⁸¹ *See supra* Section I.B.

¹⁸² *See* USMCA, *supra* note 4, art. 9.6.1 (recognizing that measures be "based on" scientific principles); *id.* art. 9.6.3 (requiring parties "base" measures on international standards or on risk assessment); *id.* art. 9.6.6(b) (requiring measures be "based on" scientific principles).

¹⁸³ *See id.* art. 9.6.8 (requiring a party "takes into account" available scientific evidence and relevant guidance).

¹⁸⁴ *See id.* art 9.6.4(a) (affirming that the SPS Agreement and Chapter 9 do "not prevent" a Party from "establishing the level of protection it determines to be appropriate"); *id.* art. 9.6.3 (requiring that measures be "based" on international standards "provided that doing so meets" the ALOP determined by the party instituting the measure); *id.* art. 9.6.10 (using ALOP to determine if a measure is "more trade restrictive than required" and if "another option" is suitable).

¹⁸⁵ *See id.* art. 9.4.1 (affirming "rights and obligations under the SPS Agreement"); *id.* art. 9.3.1(b) (stating objectives are to "reinforce" the SPS Agreement).

reminders.¹⁸⁶ No matter what this USMCA panel says in its final report, it has less capacity than the WTO to enforce panel rulings. The political and popular reality is that México places a great deal of importance in eating corn. The same goes for the United States and exporting corn. The *Decree* affects a minute part of corn exports.¹⁸⁷ American corn exports are overwhelmingly for animal feed and left alone by the *Decree*.

The upshot: take note of the trade rules a trade panel will use. The USMCA and SPS doctrine offer no clear path to find the ban inconsistent with trade obligations. Any path to rescind the ban is less clear. Because of this, the United States should pursue a resolution that protects corn exports for livestock and compromises on *masa* and tortillas. American and Mexican farmers would benefit greatly from this, far more than with the current path. As is, the dispute is a delusional chase, confused about what the USMCA requires.

¹⁸⁶ See *supra* note 6.

¹⁸⁷ See *supra* note 17.