

A ONE HEALTH APPROACH TO FOOD SAFETY AND THE RIGHT TO HEALTH IN A GLOBAL GOVERNANCE

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Abstract: The global regulation of food safety remains remarkably limited, despite growing recognition of their transboundary implications. This article examines how a cosmopolitan approach to global governance can strengthen the protection of the right to health by integrating the One Health paradigm into food safety regulation. It argues that food safety should not be treated as a merely technical issue, but as a constitutional and human rights concern within a globally interdependent context. Through the analysis of selected WTO disputes, the article illustrates how tensions between trade obligations and human rights protections reveal deeper normative and institutional gaps in global food governance.

Keywords: Right to health, Food safety, Cosmopolitanism, One Health, ESG, Sustainable Development Goals, Global Governance.

SUMMARY: 1. INTRODUCTION. 2. COSMOPOLITANISM AND GLOBAL HUMAN RIGHTS GOVERNANCE. 3. THE ONE HEALTH PARADIGM: A NORMATIVE APPROACH TO INTERDEPENDENT RIGHTS. 4. CASE STUDY: WTO-EU FOOD SAFETY TENSIONS AS HUMAN RIGHTS DILEMMAS. 5. FOOD SAFETY AND ESG: TOWARD A RIGHTS-BASED FRAMEWORK. 6. CONCLUSIONS.

1. INTRODUCTION

In an increasingly interconnected world, the distinction between national and global health risks has become blurred. This is particularly evident in the context of food safety, where the emergence and spread of foodborne illnesses, zoonotic diseases and antimicrobial resistance exemplify contemporary public health challenges that transcend national borders. These developments necessitate legal and policy frameworks that transcend national borders and address health risks comprehensively and integrally. Against this backdrop, the One Health paradigm has gained traction as a legal and operational approach that recognises the interconnectedness of human health, animal health, and the environment.

At the same time, the right to health has evolved from a state-centered entitlement to a global concern that requires coordinated responses beyond domestic policies. As pandemics and food crises have shown, the enjoyment of health rights in one part of the world is contingent upon the existence of robust health and food regulations elsewhere. Consequently, the global governance of health and food safety cannot be reduced to an isolated national policy. In fact, the right to health (and food safety) must be understood as a normative enterprise that requires the protection of justice and accountability at a global level.

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Why is the right to health, specifically food safety, not regulated on a global level? This article argues that a cosmopolitan approach to global governance offers a valuable framework to rethink food safety regulation globally, through the lens of the right to health. Cosmopolitanism scholars assert that all individuals, regardless of nationality or citizenship, are entitled to equal moral and legal protection. In the field of global health law, this perspective entails regulatory standards reflect shared human interests and interdependent vulnerabilities. In this sense, cosmopolitanism provides a conceptual intersection between the universality of human rights and the systemic logic of One Health.

The definition of One Health that suits this paper is the one proposed by the One Health High- Level Expert Panel. “One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of humans, animals, plants and ecosystems. It recognizes the health of humans, domestic and wild animals, plants and the wider environment (including ecosystems) are closely linked and interdependent” (One Health High-Level Expert Panel *et al.*, 2022, p. 4). While the One Health paradigm offers an essential integrative framework for addressing the complex interconnections between human, animal, and environmental health, it remains largely embedded in soft law instruments, voluntary cooperation, and institutional declarations. This limits its capacity to impose binding obligations on states or to guarantee accountability in the governance of global health risks. In this context, the right to health, as enshrined in international human rights law - notably Article 12 of the International Covenant on Economic, Social and Cultural Rights – provides the normative foundation that could strengthen and consolidate the aspirations of One Health.

In this sense, the Office of the United Nations High Commissioner for Human Rights has affirmed that food safety is a fundamental component of the right to adequate food and an essential requirement for realising the right to health. General Comment No. 14 of the UN Committee on Economic, Social and Cultural Rights reinforces this interpretation by clarifying that states are obliged to ensure safe food systems and environmental health as part of their human rights commitments. Yet despite its growing normative relevance, One Health remains embedded in soft law, raising the urgent question of whether it can serve as a vehicle for integrated global governance.

The article explores how food safety regulation can be aligned with cosmopolitan and One Health principles in practical terms (case study). Besides through the integration of Environmental, Social, and Governance frameworks and the Sustainable Development Goals. ESG frameworks, although primarily rooted in corporate governance and financial accountability, have increasingly influenced global discussions on food system sustainability and corporate responsibility in ensuring public health and food safety. The Sustainable Development Goals (SDGs), for their part, embody an international consensus around shared objectives that require multi-level governance, long-term vision, and cross-sectoral coordination. Nonetheless, the proposal is not just a matter of compliance. The case study of WTO-EU food safety analyses the tensions as human rights dilemmas and will give us examples of how to (or not to) build a solid policy reform.

To ground the theoretical and normative discussion in real-world dynamics, the article presents a case study of selected WTO–EU food safety paradigmatic disputes:

EC – Hormones, EC – Biotech and EC – Seal Products. These disputes, along with the recent controversy surrounding pesticide-related trade measures, highlight the legal and political tensions between trade liberalisation and public health protection. Each case demonstrates how food safety measures that are presented as human rights or environmental safeguards may conflict with the WTO's rules-based system, particularly when ethical or precautionary justifications are employed rather than strict scientific consensus. These disputes demonstrate the regulatory and power imbalances at the core of global food governance, offering a valuable perspective through which to evaluate the feasibility of incorporating One Health and the right to health into a more comprehensive international legal framework.

This article is divided into five sections. Following the introduction, Section 2 outlines the foundations of cosmopolitanism as a legal and political theory of global justice and its implications for human rights governance, with a particular focus on the right to health and food safety. Section 3 explores the concept of One Health, examining its scientific origins, institutional development and evolving role in global health policy. Section 4 examines the part played by ESG frameworks and the SDGs in promoting a rights-based approach to food safety, considering how these standards either contribute to or fall short of a cosmopolitan One Health vision. Section 5 presents a case study of WTO–EU food safety tensions as human rights dilemmas. It examines how the EU positions its regulatory standards and the extent to which these embody the principles of One Health and cosmopolitanism. The conclusion reflects on the implications of adopting a One Health approach to food safety and the right to health, proposing directions for policy reform. By integrating these perspectives, the article aims to contribute to the development of a more coherent, inclusive and ethically grounded legal framework for global food governance.

In the final section, which is dedicated to conclusions, the article argues that global food safety governance must move beyond its current fragmented, trade-centred approach and embrace a more coherent, inclusive, rights-based framework. Adopting the One Health approach, applying cosmopolitan legal theory and incorporating emerging Environmental, Social and Governance (ESG) mechanisms could shift the focus of global governance towards safeguarding food safety as a fundamental human right. The case study of WTO–EU disputes illustrates the inadequacy of the current trade regime for safeguarding health and ecological integrity, thereby reinforcing the need for normative and institutional reform. In response, the article sets out key policy recommendations for enshrining the right to health and the One Health approach in international law. This would advance a cosmopolitan vision of global food governance that prioritises health, sustainability, and justice.

2. COSMOPOLITANISM AND GLOBAL HUMAN RIGHTS GOVERNANCE

Why is the right to health, specifically food safety, not regulated on a global level? Historically, health policy has been considered an integral part of national sovereignty, enabling states to exercise considerable autonomy and resist the imposition of binding international obligations (Fidler, 2004; Lange, 2021). States have traditionally

viewed health policy as an essential aspect of their autonomy and have resisted any international obligations that might restrict their regulatory discretion. The limited global regulation of the right to health, particularly with regard to food safety, can be traced back to this primacy.

In this context, the international legal framework for food safety remains highly fragmented. Guidance on this issue is scattered across different institutional frameworks, primarily the Codex Alimentarius Commission (set up by the World Health Organization and the Food and Agriculture Organization) and the World Trade Organization's Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) (Fortin, 2023). However, these two instruments operate according to different regulatory principles. The first is based on scientific harmonisation, while the second follows trade facilitation. Neither has a unified, rights-based approach that can effectively protect food safety as an integral component of the right to health under international human rights law (Arcuri, 2015). Consequently, the international legal landscape for food safety is fragmented, with guidance dispersed among institutions such as the Codex Alimentarius and the WTO's SPS Agreement. These institutions operate under different logics and lack a unified, rights-based approach (Petersmann, 2017). This highlights the challenge of incorporating human rights into global governance structures.

Cosmopolitanism as a Theoretical Framework and Starting Point. The historical precedents of cosmopolitan theory can be traced back to Immanuel Kant and his proposal for a federation of democratic states to ensure peace and grant individuals the right to world citizenship (Dudley and Engelhard, 2011). Similar ideas can be found in the work of Hans Kelsen, who viewed international law as superior to national systems and proposed the establishment of an international court to promote peace. However, he was cautious about the formation of a world state (*Civitas Maxima*). The biggest obstacle was, and arguably still is, the national sovereignty of states. Moreover, this is a political rather than a legal question (Kelsen, 2001).

Cosmopolitanism proposes the existence of supranational institutions over and above national state institutions. It begins with the supposed crisis of the nation state, which has seen its effectiveness and capacity to act in many areas diminish due to globalisation and global interconnectedness (Arriola Echaniz, 2008; 2017; 2019). Cosmopolitanism offers a vision that transcends the nation-state, advocating the global institutionalisation of democracy and human rights. It is rooted in the idea that everyone is a member of a global community and deserves equal moral consideration and protection, regardless of their nationality (Moka-Mubelo, 2017). This perspective challenges the traditional, state-centric model by emphasising the importance of universal human rights and shared responsibility for protecting them. Rather than being opposed to globalisation, cosmopolitanism seeks to humanise it by prioritising social welfare, sustainable development and cultural respect (Held, 2010). According to Beck (2002; 2005), cosmopolitanism is a democratic project that aims to extend democracy into the transnational sphere.

Cosmopolitan theory is proposed as an alternative to the nation state. It advocates the institutionalisation of democracy at a global level, focusing on ensuring that the social

and political rights of all citizens worldwide are respected. It seeks to re-politicise the new power structures that operate beyond the nation state, and is not opposed to globalisation *per se*, but rather to hegemonic neoliberal globalisation. In fact, it advocates a humanised globalisation that prioritises social welfare, sustainable development, cultural respect, and the protection of human rights (Arriola Echaniz, 2019).

Fundamental Cosmopolitan Principles for Law. Cosmopolitan principles form the foundation for acknowledging human rights on a global scale. Firstly, all human beings are recognised as having the capacity for active action or self-determination. This capacity is accompanied by a responsibility to prevent and repair damage and to respect sustainability at the global level. The second principle recognises the individual responsibility for the consequences of actions derived from recognised rights (Arriola Echaniz, 2019).

Fundamental rights must be respected and guaranteed to all people at the global level, regardless of their nationality or state of residence. There has been discussion about a new global law that would supersede international law by operating under the principle of personality rather than territoriality and providing a guiding ethical basis for global social democracy (Held, 2016). The belief that they are the exclusive property of Western culture must be overcome. Cosmopolitan authors argue that applying them helps develop and encourage participation in global civil society. This participation should be encouraged through a non-coercive political decision-making process based on consent, which would overcome the democratic deficit of international organisations (Arriola Echaniz, 2019).

Protecting Rights on a Global Scale. The application of the cosmopolitan doctrine as a legal concept is primarily evident in the suggestion that, where national legal systems are dysfunctional, we should rely on new supranational sources of legitimacy. The idea is to move towards transnational legislation that transcends the legal systems of national states (Arriola Echaniz, 2008).

The main path from ‘top-down’ cosmopolitanism is legal and institutional development driven by traditional actors such as states and international organisations. This involves establishing a higher, supranational legal order. The democratic cosmopolitan state is based on cosmopolitan democratic law, which is a form of public law with a democratic character in the transnational space that transcends national interests. The main objective of this law is to guarantee civil liberties and cultural diversity at all levels (local, regional, national and global). This requires the cosmopolitanisation of law. Sovereignty would become shared and inclusive, overcoming its territorial and indivisible nature (Arriola Echaniz, 2008; 2019).

In the case of ‘cosmopolitanism from below’, while the principles are similar, institutionalisation would be driven by social mobilisation (Arriola Echaniz, 2019). Boaventura de Sousa Santos speaks of counter-hegemonic globalisation and subaltern cosmopolitan legality (2005), seeking socio-legal approaches that clarify hegemonic institutional changes, document resistance and affirm the potential for subversion, while imagining legal institutions built ‘from below’. This involves directing analysis towards

legal alternatives created by grassroots movements (De Sousa Santos and Rodríguez Garavito, 2007). Richard Falk (2002) proposes normative democracy as a unifying force of global civil society that goes beyond elections and includes additional guarantees to ensure that the exercise of power promotes human welfare and ecological sustainability and gives citizens access to decision-making arenas.

Key cosmopolitan principles include the recognition of every person's capacity for self-determination and the responsibility to prevent harm and promote sustainability globally. These principles underpin the call for a global legal order that guarantees fundamental rights to all, moving beyond the limitations of territoriality. However, critics argue that extending rights beyond the state without robust accountability mechanisms risks creating dependency and undermining existing democratic rights. The debate continues over how to balance respect for state sovereignty with the need for effective global human rights protection (Cabrera, 2020).

Constitutionalizing the globalisation. The notion of 'humanising' international organisations and international law itself reflects the idea of protection and protection of rights on a global scale. This process aims to reinforce the protection and respect of individuals' rights at an international level. Human rights are asserted at the supranational level to discipline the international market, for example (Arriola Echaniz, 2017). From this perspective, globalisation undergoes a process of constitutionalisation, developing institutions for the protection of human rights beyond the state (Arriola Echaniz, 2017).

Supranational courts such as the European Court of Human Rights and the Inter-American Court of Human Rights exemplify efforts to protect rights beyond national jurisdictions, though enforcement remains uneven (Rozpedowski, 2019). A paradigmatic example of supranational protection is the European system, comprising the European Court of Human Rights and the Court of Justice of the European Union. These courts advance the protection of rights beyond the remit of national constitutional courts. The Inter-American system, comprising the Inter-American Court of Human Rights, is also developing such protection. However, it encounters challenges in enforcing judgments due to the varying ratifications of the Pact of San José among American states.

As we will see in the case study, the analysis in question debates whether institutions such as the World Trade Organisation (WTO) fulfil 'constitutional functions' by guaranteeing economic freedoms and incorporating non-trade values such as the environment and human rights into their dispute settlement system and law (Petersmann, 2008). This is considered a 'constitutionalisation' of WTO law, and consequently of international law (Trachtman, 2014). Some scholars advocate for the 'constitutionalisation' of global institutions like the WTO, integrating human rights and social justice into their frameworks to address normative gaps in global governance (Petersmann, 2017). Comparative analyses suggest that cosmopolitan international agreements empowering citizens and decentralized compliance procedures are more effective than traditional state-centric agreements.

Recent scholarship highlights that the constitutionalization of international law should not only reinforce individual rights but also address the social dimension of global

governance. In fact, the legitimacy of supranational legal orders, therefore, increasingly depends on their capacity to protect not only civil and political rights but also social rights, as emphasized by Peters in her call for a ‘social limb’ in global constitutionalism (Peters, 2018). This approach mitigates the neoliberal bias of existing frameworks and supports the development of a more inclusive and equitable international legal order.

Final considerations. Despite its appeal, cosmopolitanism faces practical challenges, including the absence of enforceable global mechanisms and the risk of imposing Western values (Cabrera, 2020; Dahrendorf, 2005; Zolo, 2000). Nevertheless, it continues to inspire reforms that aim to reconcile national sovereignty with the protection of universal human rights. This change must be both top-down and bottom-up. It must be both institutional and social (Held, 2010). While cosmopolitanism provides a compelling ethical and legal framework for advancing global human rights governance, realising this vision requires overcoming significant political, legal, and cultural obstacles. The ongoing evolution of supranational institutions and the push to integrate human rights more fully into global governance demonstrate the continued importance of, and difficulties associated with, cosmopolitan ideals.

This tension is more than clear in the regulation of food safety within the framework of the World Trade Organization. Despite the growing recognition of the global nature of health and food safety issues, the international legal framework continues to reflect a normative separation between trade and human rights. The SPS Agreement, which governs national food safety measures within the multilateral trading system, prioritises non-discrimination and scientific justification. There is no reference in there to human rights obligations. This institutional and legal design perpetuates the idea that food safety is primarily an issue of market access rather than a matter of public health or social justice. Furthermore, the absence of a binding global mechanism to enforce economic and social rights, such as the right to health or the right to safe food, creates a normative gap in global governance. Legal scholars such as Ernst-Ulrich Petersmann (2012, 2013) have long criticised this discrepancy. They have argued for the integration of human rights into WTO law and for reconsidering trade policy as a means of advancing the constitutional principles of justice and sustainability. Section 4, which contains case studies of WTO-EU food safety disputes, will demonstrate these normative tensions and provide an introduction to the examination of how cosmopolitan principles could transform global trade law into a more rights-based and ethically coherent framework.

3. THE ONE HEALTH PARADIGM: A NORMATIVE APPROACH TO INTERDEPENDENT RIGHTS

Preliminary considerations. In an era where transboundary health risks are a major concern, the traditional approach of national legal regulation is no longer sufficient. One Health has emerged as a response to this reality, offering an integrative framework that acknowledges the systemic interconnection of biological, ecological, and social systems. This approach is of pertinence to the governance of food safety in a globalised world, where zoonotic diseases, antimicrobial resistance, and environmental degradation increasingly challenge the effectiveness of isolated and sectoral policy responses. Of

particular significance is the way in which the principles underlying One Health are grounded in international human rights law, primarily through the recognition of the right to health. According to this research's topic, the One Health approach aims to achieve global food safety regulation by promoting transdisciplinary collaboration across sectors and disciplines. This is intended to overcome regulatory silos and foster holistic responses to complex health threats. Article 12 of the International Covenant on Economic, Social and Cultural Rights formally recognises the inherent right of all individuals to the highest attainable standard of physical and mental health. This right encompasses access to essential resources such as safe and nutritious food, clean water, and a healthy environment.

In this sense, the Office of the United Nations High Commissioner for Human Rights has observed that food safety is a fundamental component of the right to adequate food and an essential requirement for achieving the right to health. This interpretation has been further developed in General Comment No. 14 of the UN Committee on Economic, Social and Cultural Rights. The document clarifies that states have an obligation to respect, protect and fulfil the conditions necessary for safe food systems and environmental health as part of the right to health (Hunt, 2016). However, despite its growing prominence in global health discourse, the One Health approach remains rooted in soft law instruments, institutional declarations and voluntary cooperation. This means it lacks the binding legal obligations that could consolidate its normative aspirations. Against this backdrop, an urgent question arises: Is One Health a vehicle to move from fragmented soft law to integrated global governance?

One Health Paradigm: as a concept. The One Health approach is guided by a holistic understanding of the interface between humans, animals and the environment, and emphasises the importance of interdisciplinary collaboration in effectively tackling global health issues. Its primary goal is to enhance global health equity and mitigate health disparities by addressing critical global health concerns, including zoonotic diseases, antimicrobial resistance, food security, and climate change (Zhang *et al.*, 2024, p. 2). Prominent international organisations, collectively known as the Quadripartite, have formally defined the One Health approach and play a key role in promoting its global implementation. These organisations are the Food and Agriculture Organization of the United Nations, the World Organisation for Animal Health, the World Health Organization and the United Nations Environment Programme. The One Health High-Level Expert Panel also provides implementation guidance (Zhou *et al.*, 2025). In order to foster global capacity building, enhance preparedness for preventing, predicting, identifying and responding to these complex health challenges, and promote sustainable development, the Quadripartite launched the One Health Joint Plan of Action in October 2022 (Zhang *et al.*, 2024, p. 2).

Global One Health Index Report 2022. The 2022 Global One Health Index Report, primarily developed by Zhou *et al.* (2025) as an independent academic tool, presents the latest findings of the Global One Health Index (GOHI). GOHI is an innovative evaluation tool designed to assess and promote the implementation of the One Health approach worldwide. This open-access publication emphasises the development and importance of the GOHI in monitoring One Health practices in 160 countries and

territories. It details country-level scores and provides key insights into global and regional performance. The report also offers tailored policy recommendations aimed at strengthening the adoption of One Health principles by United Nations agencies, national governments and local communities. Building on a 2021 pilot study, the report is a valuable resource for researchers, practitioners, policymakers and other stakeholders seeking to advance One Health integration in public health, environmental management and animal health governance. The following analysis examines the report's structure, findings and normative implications for global health governance.

From reading the 'Global One Health Index Report 2022' (Zhou *et al.*, 2025), we can extract the following key aspects of the One Health paradigm: interconnectedness; addressing complex health challenges; multi-sectoral collaboration; and integration into governance. First, Interconnectedness. At its core, One Health is based on the principle that the health of humans, animals, and the environment are inextricably linked. Human activities directly impact the environment, which in turn affects the health of animals and, ultimately, human well-being.

Secondly, the need for an integrated approach has become increasingly evident due to the emergence of significant public health threats at the human-animal-environment interface, i.e. complex health challenges. One Health is crucial for addressing multifaceted issues such as zoonotic disease outbreaks. These outbreaks are responsible for a significant proportion of new and re-emerging infectious diseases. Additionally, antimicrobial resistance is a complex challenge that is exacerbated by interactions across sectors, and climate change directly impacts health outcomes across all three domains. Food insecurity is another critical area where an integrative perspective is needed.

Thirdly, the One Health approach emphasises the vital need for interdisciplinary and cross-border collaboration between different sectors and disciplines, as well as at community level. The aim is to remove existing obstacles in order to develop a comprehensive One Health framework geared towards societal action. This involves placing a stronger focus on improving communication, coordination, collaboration and capacity building within national development strategies and international cooperation efforts.

Fourthly, the strategic promotion of the One Health concept involves integrating it into global governance and establishing it as a high-level agenda item. This requires engaging a wide array of stakeholders, such as international, non-governmental and civil society organisations, as well as the private sector and academia, to ensure the sustainability of the cooperation network. Intergovernmental dialogue is also encouraged in order to establish long-term financing mechanisms, global early warning and response systems, and preparedness for future pandemics in collaboration with international partners.

One Health Joint Plan of Action. The One Health Joint Plan of Action (OHJPA) for 2022-2026 represents a significant normative and strategic milestone in advancing the One Health paradigm. Developed and adopted by the Quadripartite, the OHJPA aims to provide a unified operational framework for the global implementation of One

Health principles. Its primary objective is to coordinate international efforts, set priorities and guide policy action, institutional collaboration and capacity building at the global, regional and national levels. By offering a structured approach to tackling complex health challenges at the interface between humans, animals, and the environment, the OHJPA aims to transform the One Health concept from an aspirational framework into a coherent model for integrated global health governance (World Health Organization *et al.*, 2022). This analysis examines the content, strategic priorities and normative significance of the OHJPA within the broader context of One Health implementation.

This plan was created in response to international calls for preventing future pandemics and promoting sustainable health through the One Health approach and acknowledges that economic development has often occurred at the expense of ecosystems and environmental health, leading to tremendous pressures on natural systems (World Health Organization *et al.*, 2022, p. 3). It emphasizes the urgent need to reassess and transform these interactions to achieve economic, environmental, and social sustainability, thereby contributing to the Sustainable Development Goals (World Health Organization *et al.*, 2022, pp. 22-26).

The core of the plan outlines Action tracks (World Health Organization *et al.*, 2022, Part. 3, pp. 21-55). Regarding the core of this article, we would dive into the Action track 4: Strengthening the assessment, management and communication of food safety risks. Action Track 4 is designed to create a more resilient and effective global food safety system by embedding the holistic One Health philosophy into policy, data collection, risk assessment, and surveillance, acknowledging the complex interplay between all living organisms and their shared environment (World Health Organization *et al.*, 2022, pp. 39-43).

Food systems, encompassing the entire pathway from production to consumption, are situated at the intersection of human, animal, plant, and environmental health. The methods employed in food production influence not only the safety of the final product, but also animal health and welfare, plant health, and environmental integrity. Conversely, the conditions of the production environment, as well as the health of animals and plants, can significantly affect food safety. This intricate interdependence underscores the necessity of adopting a One Health approach to effectively safeguard food safety, while also highlighting that ensuring food safety is integral to advancing One Health objectives (World Health Organization *et al.*, 2022, pp. 39-40).

This action aims to bolster national food safety systems by focusing on the establishment or improvement of critical infrastructure components. This includes food safety legislation, standards, guidelines, laboratory capacity, food control activities, and emergency preparedness and response. The goal is to help countries reduce risks from unsafe food, ensure food authenticity, and enhance fair and safe trade, with particular attention to low- and middle-income countries (World Health Organization *et al.*, 2022, pp. 40-41). Action Track 4 is structured into three interdependent actions, each with specific activities, deliverables, and timelines: Action 4.1: Strengthening the One Health approach in national food control systems and food safety coordination; Action 4.2: Utilize and improve food systems data and analysis, scientific evidence and risk assessment in

developing policy and making integrated risk management decisions; and Action 4.3: Foster the adoption of the One Health approach in national foodborne disease surveillance systems and research for the detection and monitoring of foodborne disease and food contamination.

Final considerations: the right to food safety as a human right. Although the One Health paradigm offers a vital integrative framework for addressing the complex relationships between human, animal and environmental health, it is primarily based on non-binding legal instruments, voluntary cooperation and institutional declarations. Integrating One Health within a rights-based framework is crucial for transforming its holistic vision into enforceable commitments and coherent global governance.

There are clear examples of how the right to health creates legal obligations for states. The right to health obliges states to respect, protect and fulfil the conditions necessary for health, including food and environmental safety (CESCR, 2000). For instance, states must regulate private actors to ensure food safety, adopt policies to combat antimicrobial resistance and provide access to clean water and safe nutrition (CESCR, 2000, paras. 33-37).

Ensuring food safety on a global scale requires scientific collaboration, as well as regulatory mechanisms that can monitor compliance, enforce standards, and apply sanctions. However, most national states have been reluctant to cede these capacities to international bodies. This reluctance reflects deeper conflicts between national sovereignty, economic competitiveness, and the often contested neutrality of technological standards. As Jasanoff (2004) has argued, the role of science in policymaking is often influenced by political and economic agendas, determining which risks are prioritised and which knowledge is given legitimacy. Similarly, De Schutter (2014) emphasises that food governance cannot be reduced to technical efficiency or market logic. On the contrary it must be anchored in rights-based principles that address power asymmetries and ensure accountability. These insights illuminate the complex landscape in which ESG frameworks are now emerging as influential tools for advancing food safety. This raises the question of whether they can meaningfully contribute to a more rights-oriented and globally coherent system of food governance.

Against this backdrop, ESG frameworks have gained prominence as instruments capable of shaping corporate behaviour and guiding investment decisions towards more sustainable and socially responsible practices². Originally developed in financial and business contexts, ESG criteria are now being promoted by international organisations, investors, and regulators as a means of achieving long-term sustainability goals than can be related with food safety, environmental health, and labour rights. Thanks to their flexibility and global reach, ESG criteria have the potential to generate accountability through non-state mechanisms such as market access, reputational pressure and stakeholder reporting. However, this potential has limitations. ESG standards remain

² In 2004, the term ‘ESG’ became official after its first mainstream appearance in a report titled, “Who Cares Wins” (International Finance Corporation, 2004).

largely voluntary, inconsistent and susceptible to corporate influence. The challenge for this article, then, is to assess how ESG can evolve from a market-oriented compliance tool into a normative framework that enforces human rights obligations and supports the transition from fragmented global soft law to an integrated, rights-based governance system for food. In this line, Action Track 4 of the global food safety framework provides a detailed plan for incorporating the One Health approach into national food safety systems, risk assessments and surveillance (World Health Organization *et al.*, 2022, pp. 39-43). By strengthening legislative frameworks, scientific capacities and integrated monitoring at the human-animal-plant- environment interface, Action Track 4 supports national states in meeting their constitutional obligations to protect public health and environmental integrity, as well as their international commitments under the WTO SPS Agreement. In this sense, Action Track 4 helps to reduce the legal tensions that have emerged in WTO disputes (such as EC – Hormones, EC – Seal Products analysed in section 4), in which measures intended to protect health, or the environment have been contested as unjustified barriers to trade. Promoting science-based, transparent and proportionate SPS measures reinforces the legitimacy of food safety actions as expressions of constitutional values and fundamental rights while facilitating compliance with international trade law.

4. CASE STUDY: WTO-EU FOOD SAFETY TENSIONS AS HUMAN RIGHTS DILEMMAS

Introductory considerations. Through the SPS Agreement, the WTO plays a central role in global food safety governance. This agreement requires member states to base food safety regulations on scientific risk assessments, while encouraging harmonisation with international standards, such as those set by the Codex Alimentarius Commission. This framework aims to balance states' right to protect public health with their obligation not to create unnecessary barriers to trade (Kastner & Pawsey, 2002). In the context of WTO dispute settlement (Dispute Settlement Understanding, 1995), the tension between trade obligations and human rights protections becomes particularly apparent, as states often encounter legal limitations when attempting to regulate food safety in line with public health, environmental, or ethical considerations³.

The European Union is a leading global standard-setter and a frequent participant in WTO food safety disputes. While the EU's stringent food safety regulations often exceed international norms and have positioned it as a regulatory leader, they have also made it a 'preference outlier'. This limits its influence in global standard-setting and makes it a recurrent party in high-profile WTO disputes, such as EC – Hormones and EC – Seal Products (Young, 2014). These disputes highlight the EU's dual role of advancing high food safety standards domestically and defending them internationally, sometimes in the face of challenges from trading partners and the WTO dispute settlement system. Therefore, while these cases demonstrate functional convergence, they also reveal a normative disjuncture: global trade law incorporates scientific health standards to

³ Another interesting line of research would be the analysis of the current crisis of the DSS at the WTO and its plausible reform adopting a right-based orientation in order to constitutionalise the WTO law.

facilitate regulatory harmonisation, yet remains institutionally and legally detached from the human rights regime.

A central normative question emerges: Are these legal disputes fundamentally about the application of rules, or do they reflect deeper power dynamics between regulatory actors? Research suggests that while the SPS Agreement provides a legal framework for resolving disputes, outcomes often hinge on the relative power and preferences of the parties involved, with the EU's regulatory stringency sometimes undermining its ability to shape global norms (Young, 2014). As will be explored in this case study, the analysis debates whether institutions such as the World Trade Organization fulfil 'constitutional functions' by guaranteeing economic freedoms while incorporating non-trade values such as environmental protection and human rights into their legal reasoning and dispute settlement mechanisms (Petersmann, 2008). This evolution has been described as the constitutionalisation of WTO law, and by extension, of international law itself (Trachtman, 2014). From a cosmopolitan One Health perspective, these disputes underscore the need for a more integrated approach that bridges the gap between trade law and human rights, including the right to health and food safety. Current trade law frameworks remain institutionally detached from the human rights regime, leaving significant gaps in the effective protection of food safety at the international level. The EU's experience demonstrates both the potential and the limitations of using trade law to advance broader public health and ethical objectives, highlighting the importance of ongoing debate about the constitutionalisation of WTO law and the incorporation of non-trade values into global food governance (Corini, 2015).

Key Disputes. In the context of global food safety and the right to health, the most instructive and paradigmatic food safety cases are the European Communities – Hormones dispute and the European Communities – Biotech Products dispute. Both cases directly address the intersection of food safety, scientific risk assessment and the limits of national regulatory autonomy under the SPS Agreement (Matsushita, 2009). The EC – Hormones dispute is particularly notable in demonstrating how the WTO strikes a balance between trade liberalisation and the right of states to safeguard public health, and how scientific evidence is considered alongside precautionary measures (Kastner & Pawsey, 2002). The EC – GMOs dispute further highlights the challenges of regulating new food safety technologies and the tensions between domestic risk preferences and international trade obligations (Guzman, 2004). The EC – Seal Products dispute introduces an important ethical dimension by incorporating public morality and animal welfare into the WTO's dispute settlement system, raising questions about the evaluation of non-scientific justifications for trade restrictions within the framework of General Agreement on Tariffs and Trade exceptions⁴. Together, these disputes reveal the limitations of the WTO's current approach, which often treats food safety as a technical trade issue rather than a broader

⁴ Disputes involving food certification and labelling, such as the US – Country of Origin Labelling case and the tuna-dolphin and shrimp-turtle cases, are also relevant for exploring how domestic political pressures and environmental or health concerns shape compliance and regulatory outcomes (Cezar, 2020). In this article, the focus is going to be oriented to disputes where European Union (previous, European Communities) has been sued to narrow geographically the analysis. Nonetheless, there is left here a very appealing line for further research.

human rights or constitutional concern. They also highlight the need for more inclusive, health-centred global governance frameworks.

EC – Hormones (DS26/DS48): Precaution vs. Scientific Risk. The EC – Hormones dispute arose from the European Union’s ban on imports of hormone-treated beef, citing concerns over potential public health risks, including long-term effects such as endocrine disruption. The ban, implemented through Council Directive 96/22, covered both synthetic and natural hormones and applied to both domestic and imported meat, with exceptions only for therapeutic and zootechnical purposes (Neugebauer, 2000). The United States and Canada challenged the ban under the SPS Agreement by failing to provide a risk assessment that adequately supported the ban, even though the Appellate Body disagreed with the Panel regarding the consistency of the ban with international standards (Davey, 2006).

The case thus epitomises the tension between the EU’s reliance on the precautionary principle, an approach that allows for preventive action in the face of scientific uncertainty, and the WTO’s emphasis on science-based risk regulation and procedural consistency among members (Gruszczynski, 2013). While the SPS Agreement does allow for provisional measures in cases of scientific uncertainty (Article 5.7), the EU’s ban was not found to meet these requirements (Carlarne, 2007, pp. 306-309).

The article 5.7 of the SPS Agreement is a qualified exemption from the general requirement for science-based measures, designed to prevent abuse of the precautionary principle for protectionist purposes (Ansari and Wartini, 2014). The provision is interpreted narrowly: it applies only when scientific evidence is truly insufficient, and imposes procedural obligations to ensure that provisional measures are temporary and subject to ongoing review (Mercurio and Shao, 2010). The EU’s approach was found lacking because it treated scientific uncertainty as absolute, rather than relative and evolving with new evidence (Pauwelyn, 1999).

From a One Health perspective, the EC – Hormones dispute highlights the interconnectedness of human health, animal welfare, and environmental concerns, as the use of growth hormones in livestock production raises systemic questions about food safety, sustainability, and public trust in regulatory institutions. This case exposes the challenges of accommodating higher domestic health standards and public values within the WTO’s trade framework, raising important questions about the scope of regulatory autonomy and the legitimacy of international standard-setting processes (Gruszczynski, 2013). A cosmopolitan approach invites reflection on whether international trade rules should provide greater space for domestic regulatory autonomy when it is grounded in higher public health standards and societal values.

EC – Approval and Marketing of Biotech Products (DS291/DS292/DS293). The EC – Biotech Products dispute arose from complaints by the United States, Canada, and Argentina, who challenged the European Union’s de facto moratorium on the approval of genetically modified organisms (GMOs). While the EU did not formally prohibit GMOs, it effectively suspended new authorizations and permitted Member States to maintain national bans, citing public health, environmental, and consumer concerns. These

measures, in practice, constituted a prolonged suspension of the EU's approval system, which the complainants argued contravened the WTO's SPS Agreement (Winham, 2009).

In its 2006 report, the WTO Panel found that the EU had breached several SPS provisions, notably by failing to complete risk assessments and by not justifying the moratorium or Member State bans on scientific grounds as required by Article 5.1. The Panel did not rule on the intrinsic safety of GMOs, but its reasoning reinforced the primacy of science-based risk assessment in SPS measures, thereby limiting the EU's reliance on the precautionary principle as a sufficient legal basis for regulatory delay (Bodansky and Lester, 2007).

The Panel considered the concept of 'insufficiency of scientific evidence' under Article 5.7 of the SPS Agreement to be an objective, binary threshold; either there is sufficient evidence to conduct a risk assessment or there is not. However, this approach has been criticised for failing to recognise that scientific sufficiency is inherently relative and context-dependent. Gruszczynski (2008; 2009) argues that sufficiency should be assessed in light of the specific regulatory, cultural and scientific context in which decisions are made and that it may legitimately differ between scientific communities or regulatory authorities in different countries. By contrast, the Panel's method risks imposing a one-size-fits-all standard that does not account for diversity of opinion within the scientific community or the evolving nature of scientific knowledge. In summary, the Panel's absolute and decontextualised approach to scientific sufficiency has been criticised for disregarding the relativity of scientific uncertainty, the legitimacy of culturally sensitive precaution and the evolving nature of scientific knowledge in regulatory decision-making.

The case also illustrates the expanding scope of the SPS Agreement. The panel interpreted it as covering a wide range of health and environmental measures, raising concerns about the WTO's encroachment on domestic regulatory autonomy and environmental protection. The panel's narrow interpretation of the precautionary principle and preference for quantifiable, science-based evidence highlights the ongoing tension between precautionary regulation and the risk-based model embedded in WTO law (Peel, 2006).

From a One Health perspective, the dispute underscores the complex interdependence of human, animal, and environmental health, and the challenge of regulating emerging biotechnologies amid scientific uncertainty and contested risk perceptions (Footer, 2006). The EU's precautionary stance can be understood as an effort to mitigate not only known risks but also emerging and uncertain harms at the intersection of agriculture, food safety, and environmental sustainability, precisely the kind of systemic thinking that One Health encourages.

Finally, the dispute raises normative questions about global regulatory pluralism and the legitimacy of international trade law in constraining democratically endorsed public health and environmental standards. Should international trade law override national or regional regulatory autonomy when it is exercised to protect fundamental values such as health and environmental integrity? The SPS Agreement's strictures may inadequately

accommodate legitimate diversity in public values and risk tolerances, calling for a more flexible, pluralistic approach to global governance that recognizes the legitimacy of precautionary and context-sensitive regulatory choices (Foster, 2008). It calls for a rethinking of global regulatory pluralism, one that accommodates legitimate diversity in public health priorities within a shared framework of human rights and environmental responsibility.

EC – Seal Products (DS400/DS401): Morality, Animal Welfare, and Cultural Rights. The EC – Seal Products dispute is a landmark case that expanded the WTO's engagement with non-economic regulatory objectives, particularly those relating to public morals, animal welfare, and indigenous rights. The EU's ban on seal products was motivated by ethical concerns over animal welfare. Canada and Norway argued that the ban violated non-discrimination obligations under the GATT and the TBT Agreement. This case is notable for its engagement with non-economic regulatory objectives, particularly at the intersection of animal welfare, public morals, and indigenous rights.

Both the Panel and the Appellate Body recognised that animal welfare concerns could be considered part of public morals under Article XX(a) of the GATT. The AB's approach confirmed that the definition of public morals is inherently variable and context-dependent, reflecting the diverse values of WTO members. While the AB upheld the EU's objective, it found that the exceptions in the regime were applied inconsistently, particularly those for indigenous communities (Inuit). This resulted in arbitrary or unjustifiable discrimination, which is contrary to the chapeau of Article XX (Fernández-Pons and Lembo, 2019). The Panel and the Appellate Body clarified that a measure with internal exceptions can still qualify as a legitimate exception under Article XX, provided that the exceptions serve acceptable policy objectives and are not applied in a manner that undermines the measure's core purpose. This marked a significant interpretative development, affirming that WTO members may restrict trade in order to protect ethical values, even when such measures are not strictly science-based or economically motivated. Besides, this new possibility of interpretation highlights the challenge of balancing ethical aims with the fair treatment of affected groups, particularly indigenous peoples whose cultural rights are implicated. The AB's acceptance of pluralistic regulatory values indicates a wider acknowledgement of the validity of ethical and cultural diversity in trade policy. However, it also raises concerns regarding the consistency and predictability of WTO law (Das and Narayan, 2016).

Unlike the EC – Hormones dispute, the Seal Products case centred on non-scientific justifications such as public morals and cultural rights. This challenged the WTO's traditional focus on technical or economic criteria. It affirms the legitimacy of animal welfare and public morals as grounds for trade restrictions, but requires that such measures be applied non-discriminatorily. The case exemplifies the ongoing tension between trade liberalisation, ethical pluralism and the rights of indigenous peoples. It calls for a nuanced approach to global regulatory governance that respects both universal and particularistic values (Fernández-Pons & Lembo, 2019). The One Health approach provides further normative depth by emphasising the connections between animal health, biodiversity conservation and long-term public health – concerns that go beyond

strict scientific quantification and are aligned with ethical and ecological reasoning. Cosmopolitanism further develops this perspective by posing the question: How should global trade governance accommodate cultural pluralism, collective ethical commitments, and non-economic expressions of public interest? The recognition of moral and cultural grounds as valid justifications for trade restrictions, even if imperfectly applied, suggests that the WTO system is open to rights-based or ethical reasoning to some extent. This reveals a potentially significant development: the possibility of recognising the human rights to health and food security through moral, ecological and cultural imperatives as well as scientific and economic criteria. Such recognition could open the door to a broader normative debate within the WTO about how to reconcile trade rules with the evolving demands of global health and food justice, because the WTO Law only regulates the food safety at the present.

Trade Concerns: EU Pesticides and Sustainable Food. Although no formal WTO dispute has been initiated, several members have expressed ongoing concerns about the EU's restrictive pesticide policies. These include maximum residue limits and hazard-based cut-off criteria under the EU's Green Deal and Farm to Fork Strategy. Critics argue that these measures effectively act as trade barriers, particularly affecting agricultural exports from the Global South.

The European Union's increasingly stringent pesticide regulations, particularly the harmonization and tightening of Maximum Residue Limits (MRLs), have become a focal point of international trade tensions. Non-EU countries such as Brazil, Argentina, and the United States have raised concerns that these measures function as de facto trade barriers, disproportionately affecting agricultural exports from the Global South. Empirical research demonstrates that stricter EU MRLs can significantly reduce bilateral trade flows; for example, a more stringent MRL policy has been shown to decrease US exports of fruits and vegetables to the EU by as much as 13.8% (Hejazi *et al.*, 2022, p. 7). These findings underscore the trade-restricting nature of regulatory divergence in pesticide standards.

At the same time, the EU is defending its pesticide policies, arguing that they are science-based and aligned with the broader sustainability and public health objectives set out in the Green Deal and the Farm to Fork Strategy⁵. In fact, the harmonisation of maximum residue levels across EU Member states has increased intra-EU trade, improved product quality and lowered prices. This suggests that regulatory alignment can have positive outcomes for trade and consumers within the EU (Shingal and Ehrich, 2024)⁶.

⁵ The Farm to Fork Strategy is at the heart of the European Green Deal aiming to make food systems fair, healthy and environmentally friendly. The strategy sets out both regulatory and non-regulatory initiatives, with the common agricultural and fisheries policies as key tools to support a just transition. For more information, see the European Commission's official page on the *Farm to Fork Strategy*: https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en (Accessed: 01 July 2025).

⁶ Furthermore, evidence from the EU-Swiss agri-food trade relationship suggests that regulatory homogeneity, whereby trading partners adopt similar MRLs, can enhance food security by increasing product variety, lowering prices and boosting import volumes (Fiankor & Shingal, 2025).

However, the externalization of EU food safety standards through its trade relationships raises complex questions about the global governance of food safety and the normative reach of the SPS Agreement. Discrepancies in pesticide regulations, particularly when developing countries use substances banned in the EU or maintain different MRLs, create significant challenges for exporters and can disrupt international trade. In fact, these regulatory gaps are further complicated by the lack of harmonization with Codex MRLs and the persistence of unauthorized pesticide use in some regions, highlighting the need for greater international cooperation and capacity-building in pesticide management (Kubiak-Hardiman *et al.*, 2022). Looking ahead, the EU's approach to pesticide regulation, which is based on the principles of precaution and sustainability, could provide an opportunity to test the WTO's capacity to support human rights-based and ecologically sustainable food systems. As the EU continues to align its food safety standards with the Sustainable Development Goals and Environmental, Social and Governance frameworks, future legal disputes may challenge the extent to which WTO law can evolve to balance trade facilitation with protecting health, the environment and broader societal values.

Final considerations. What do these disputes show us about the gap between global trade law and global health law? The collaboration between the WTO and the Codex Alimentarius Commission exemplifies both an effort to align global trade law with international food safety norms, and the persistence of structural and normative gaps between trade and health governance. Pursuant to the Agreement on the SPS Agreement, WTO Members are encouraged to base their domestic sanitary and phytosanitary regulations on “international standards, guidelines or recommendations” (Article 3(1)), with the Codex Alimentarius explicitly identified as the relevant standard-setting body for food safety (SPS Agreement, Annex A, para. 3(a)). The Codex, established in the early 1960s by the Food and Agriculture Organization and the World Health Organization, operates as a science-based forum producing voluntary food safety standards with the dual purpose of protecting public health and promoting fair trade practices (Food and Agriculture Organization and World Health Organization, 2020).

However, this *modus of understanding* reveals a significant governance gap: while the Codex standards reflect robust scientific consensus and public health expertise, they lack direct legal force unless the Codex is integrated into WTO adjudication. Within the WTO framework, the Codex standards serve primarily as reference points for determining whether national measures are ‘necessary’ or ‘justified’ under SPS Agreement. In disputes such as EC - Hormones (DS26, DS48) and EC - Sardines (DS231), the Dispute Settlement Body has relied on Codex standards to assess whether domestic food safety regulations constitute disguised trade barriers (World Trade Organization Appellate Body, 1998, WT/DS26/AB/R and WT/DS48/AB/R; WTO Appellate Body, 2002, WT/DS231/AB/R). This use, however, subordinates public health protection to the trade logic of non-discrimination and market access, rather than recognizing food safety as an enforceable component of the human right to health (Hunt and Backman, 2008).

Furthermore, the Codex Alimentarius operates as a soft law instrument. Therefore, the Codex runs without mechanisms for enforcement, participatory oversight, or individual redress. Its standards are not binding under international human rights law and are not

framed within a rights-based paradigm. The SPS Agreement itself conceptualizes food safety primarily in terms of technical barriers to trade, rather than through a framework of public health accountability or state obligations to protect the right to safe food (SPS Agreement, Article 2 and Annex A, para. 1).

As illustrated in the preceding case study, this tension is central to a broader scholarly debate, this tension is central to a broader scholarly debate over whether institutions such as the WTO can be understood to perform ‘constitutional functions’ - namely, by guaranteeing economic freedoms while also incorporating non-trade values such as environmental protection and human rights into their legal reasoning and dispute settlement mechanisms (Petersmann, 2008). This process has been described as the ‘constitutionalisation’ of WTO law and, by extension, of international law itself (Trachtman, 2014). The extent to which food safety is conceptualized as a trade measure rather than a human right thus raises important questions about the legitimacy, limits, and evolving role of global trade institutions in protecting non-economic values.

5. FOOD SAFETY AND ESG: TOWARD A RIGHTS-BASED FRAMEWORK

Preliminary considerations. The intersection between food safety and human rights is often overlooked in global governance debates, where the focus tends to gravitate toward food security and access. Yet food safety, defined as the assurance that food will not cause harm to the consumer when prepared and consumed as intended, is an equally fundamental dimension of the right to adequate food. While food security concerns availability, access, and stability of food supply; food safety concerns the quality and safety of what is consumed. This distinction is essential: a person may have regular access to food and still suffer serious violations of their right to health due to contaminated or unsafe food products. The Office of the High Commissioner for Human Rights has affirmed that the right to food encompasses not only the availability of food but also its safety and acceptability, as reflected in General Comment No. 12 of the Committee on Economic, Social and Cultural Rights, which interprets Article 11 of the International Covenant on Economic, Social and Cultural Rights to include food safety as a core component of the right to adequate food (Ayala and Meier, 2017). The Universal Declaration of Human Rights, Article 25, also recognizes the right to a standard of living adequate for health and well-being, including food, which implicitly requires that food be safe and nutritious (United Nations General Assembly, 1948).

From a governance perspective, the Codex Alimentarius, developed by the FAO and WHO, has become the central reference point for international food safety standards and is explicitly recognized in the WTO’s SPS Agreement. However, the voluntary and technocratic nature of these instruments raises questions about their normative robustness and ability to advance a rights-based approach, as they often lack direct enforceability and may not fully integrate human rights obligations (Milian Gómez, 2024). In this context, ESG frameworks offer an emerging avenue for embedding food safety obligations within broader accountability systems, but their contribution remains contested and incomplete, as they are typically non-binding and rely on market and reputational incentives rather than legal compulsion (Pettoello-Mantovani and Olivieri, 2022).

The EU's approach to pesticide regulation, grounded in principles of precaution and sustainability, may offer an important testing ground for assessing whether the WTO can accommodate food systems that prioritize human rights and ecological values. As the EU continues to align its food safety standards with the SDGs and ESG frameworks, future legal disputes may challenge the current balance between trade liberalization and the protection of health, the environment, and other public goods (Pettoello-Mantovani and Olivieri, 2022). These emerging tensions invite a shift in how food safety is conceptualized: not simply as a technical trade issue, but as an integral element of the human right to health and dignity, as recognized in evolving international doctrine and legal scholarship (Milian Gómez, 2024).

This shift also demands broader governance reflection. How can international legal frameworks ensure that food is not only available and accessible, but also safe and health-promoting? Can the fragmentation between trade law, public health, and human rights be overcome through integrated tools such as ESG reporting and SDG-based governance mechanisms? The literature suggests that a rights-based approach—grounded in both legal and institutional innovation—can embed food safety into the evolving architecture of global sustainability and accountability, but this requires explicit recognition of food safety as a legal right and the harmonization of international, regional, and national legal frameworks (Milian Gómez, 2024).

ESG frameworks. Although ESG frameworks originated in the fields of corporate governance and financial risk management, they have increasingly influenced global discussions on sustainability in food systems, particularly with regard to corporate responsibility for public health and food safety. The growing importance of ESG in the food sector is evident in recent EU regulatory proposals and sustainability action plans, which emphasise the necessity for companies to incorporate environmental, social and governance considerations into their operations and reporting practices (Gossain, 2023)⁷. Similarly, the SDGs provide a shared normative agenda that promotes long-term ecological balance, cross-sectoral coordination and the protection of fundamental rights, including the right to health. Together, both the ESG and the SDGs create a new space in which food safety can be incorporated into institutional accountability and sustainability metrics. Increasing pressure from consumers, investors and regulators for transparent ESG reporting is prompting food companies to adopt robust sustainability and food safety practices (Gołębiewski, 2023). Nonetheless, the complexity and diversity of ESG regulations across jurisdictions present significant legal and ethical challenges, highlighting the need for clearer, harmonised guidelines to ensure effective, accountable implementation (Gossain, 2023).

The ESG and Codex Alimentarius. Although ESG standards are often described as soft law due to their voluntary nature and the risk of superficial compliance, such as

⁷ These frameworks are reinforced by international initiatives such as the Task Force on Climate-Related Financial Disclosures and the Paris Agreement, which have accelerated the harmonisation of reporting standards and provided stronger legal foundations for ESG compliance worldwide. In a One Health Approach to Food safety and the Right to

greenwashing, they are becoming increasingly influential in shaping corporate behaviour. This influence stems from investment screening, reputational incentives, and pressure from consumers and civil society. For example, the UN Principles for Responsible Investment encourage investors to consider ESG risks, including those related to food safety and public health, in their decision-making processes. This, even being soft law, creates a form of market-driven accountability. In this context, internationally recognised food safety standards, such as those of the Codex Alimentarius and the WTO's SPS Agreement, can be incorporated into corporate supply chain policies, quality assurance protocols, and ESG reporting (Gregory *et al.*, 2024).

Although these ESG frameworks and the Codex Alimentarius are not legally binding, firstly, the ESG frameworks may thus serve as a complementary governance mechanism even in the absence of formal legal obligation, providing a pathway for food safety to become part of private sector compliance and transparency. Secondly, the Codex Alimentarius offers a comprehensive set of principles for good hygiene practices, which can guide food producers in aligning their processes with both food safety and ESG objectives. However, the diversity and lack of harmonization in ESG ratings and reporting methodologies present ongoing challenges, underscoring the need for clearer guidelines and more robust integration of Codex principles into ESG frameworks to ensure meaningful and accountable implementation (Gregory *et al.*, 2024). In this context, the SPS Agreement and the jurisprudence of the WTO in its implementation can serve as a guide to move from soft law to more binding law.

Soft Law as a Pathway to Hard Law: The Normative Evolution of ESG Frameworks. Despite critiques that ESG standards lack binding authority and are vulnerable to greenwashing, it is essential to recognize that soft law has historically served as a stepping stone to binding obligations in international law. For example, in international environmental law, the progression from the non-binding Stockholm Declaration (1972) to the Rio Declaration (1992), and ultimately to legally binding agreements like the Paris Agreement (2015), illustrates how soft law can lay the groundwork for subsequent hard law instruments. Similarly, in the domain of business and human rights, the UN Guiding Principles on Business and Human Rights (2011), though non-binding, have significantly influenced national legislation, corporate policies, and due diligence obligations, as seen in the development of the EU's Corporate Sustainability Due Diligence Directive (European Union, 2024).

Soft law instruments, such as ESG frameworks, offer flexibility and broad participation, allowing ambitious norms to be established and political pressure to be exerted on laggards, which can accelerate the transition to binding regulation. In the context of global health and sustainability, soft law policies have shaped global norms and expectations, but, especially in crisis situations, their limitations have prompted calls for more robust, enforceable legal frameworks. Thus, ESG frameworks can be seen as incubators of normative consensus. When reinforced by political will, civil society engagement, and investor expectations, they may evolve into binding regulatory regimes at domestic, regional, or international levels. From a food safety perspective, this dynamic offers a promising avenue for embedding Codex Alimentarius principles, sustainability

goals, and the right to health into more robust legal and policy frameworks, leveraging the complementary strengths of both soft and hard law to advance global standards and accountability (Meier *et al.*, 2025).

ESG and Corporate Behaviour: Internalizing Food Safety through Market Accountability. ESG frameworks have reshaped corporate accountability by pushing companies to uphold food safety standards, not just financial performance. In the food sector, pressure from investors, consumers, and reputational risks increasingly incentivises alignment with Codex Alimentarius guidelines. Many global food companies have already begun to voluntarily implement Codex-aligned standards. For example: adopting Hazard Analysis and Critical Control Points systems, carrying out food safety audits based on Codex guidelines and disclosing risk management practices (Camilleri, 2025). Empirical research shows that continuous environmental, social and governance management activities in the food sector enhance corporate reputation, consumer trust and intention to buy again, and demonstrates that market-driven accountability can be a powerful motivator for food safety compliance (Tian *et al.*, 2024). Furthermore, ESG disclosures are increasingly being used to communicate responsible food safety practices to stakeholders. These disclosures are guided by standards such as those set out by the Global Reporting Initiative and the Sustainability Accounting Standards Board (Camilleri, 2025). This process of internalization demonstrates how soft norms, when embedded in ESG metrics and investor expectations, can influence corporate behaviour. Although it cannot replace formal legal frameworks, it offers an alternative mode of governance, particularly in a globalised food system where corporations frequently operate beyond the jurisdiction of national regulators (Tian *et al.*, 2024).

Final Considerations. In order to strengthen the nascent alignment between global food safety standards and corporate responsibility, public institutions and international organisations should actively support the development of ESG reporting frameworks that explicitly incorporate the principles of the Codex Alimentarius. By encouraging firms to embed food safety into their risk assessments, sustainability metrics, and governance structures, such guidance can promote a more coherent and accountable model of food system governance. This effort would not only enhance transparency and consumer trust, but also contribute to the recognition of food safety as a core element of the human right to health. In doing so, it could help bridge the normative divide between trade law, public health, and human rights-advancing a cosmopolitan vision of global governance in which private and public actors share responsibility for upholding health and sustainability standards across borders (Camilleri, 2025).

6. CONCLUSIONS

Reframing Global Food Safety through the Right to Health. This article explores the normative, legal and institutional disconnect between food safety regulation and the international human rights framework, with a particular focus on the right to health. Although food safety is an essential aspect of the right to adequate food, it is marginalised within the global legal framework, primarily due to the ongoing fragmentation of health governance based on sovereignty. In this context, the absence of binding global food safety

standards is not merely a technical oversight, but reflects deeper structural asymmetries in the global order, such as those between trade and health law, soft law and enforceable norms, and market efficiency and ethical responsibility.

The right to health, as set out in international human rights law (particularly Article 12 of the International Covenant on Economic, Social and Cultural Rights), obliges states to ensure access to safe and nutritious food. However, there is currently no binding international legal instrument that integrates food safety as an enforceable legal entitlement beyond national borders. As demonstrated, the fragmented normative architecture, characterised by the WTO SPS Agreement, the Codex Alimentarius and ESG soft law, fails to coalesce around a unified, rights-based framework for food governance. This regulatory gap suggests the need for a paradigm shift, from sectoral governance based on trade facilitation, to an integrated regime that embeds health and safety within global public goods frameworks. The One Health paradigm offers a compelling means of achieving this transformation, particularly when reinforced by cosmopolitan legal theory and ESG accountability mechanisms.

From Soft Law Aspirations to Integrated Global Governance: The Role of One Health. The One Health approach provides a comprehensive understanding of the interconnected nature of human, animal, and environmental health. In practice, however, it remains grounded in soft law instruments, declarations and institutional coordination platforms, lacking enforceable mechanisms. This limits its capacity to address cross-border threats with binding force. While the One Health Joint Plan of Action (2022–2026) and the Global One Health Index represent significant progress, they still operate within voluntary regimes. Can One Health evolve from a soft law discourse into a normative foundation for integrated governance? This article argues that it can, but only if it is anchored within binding legal obligations, particularly the right to health. The legal codification of One Health principles would strengthen the accountability of both states and corporations and provide a coherent framework for addressing emerging risks, such as outbreaks of zoonotic diseases, antimicrobial resistance and collapse of the food system. One Health is uniquely positioned to bridge current governance silos. Its integrative ethos, based on scientific cooperation and cross-sectoral coordination, aligns with the pluralistic and ethical principles of cosmopolitan legal theory. Integrating One Health into international legal frameworks through SDG alignment, ESG integration and reinterpreting existing treaties offers a pragmatic way to enhance legal coherence, improve public health resilience and safeguard shared ecological resources.

Key findings from the WTO–EU food safety case study: Are these disputes about rules or about power? An analysis of WTO–EU food safety disputes (EC–Hormones, EC–Biotech, EC– Seal Products and pesticide trade concerns) reveals an ongoing tension: is the WTO legal order equipped to protect health as a human right, or is it predisposed to prioritise trade liberalisation? While WTO jurisprudence has slowly evolved to recognise certain non-economic values (e.g. public morals and animal welfare), the evidence suggests that its core institutional design continues to favour market access and scientific risk rationality over precautionary, ethical, or context-sensitive approaches to regulation.

This asymmetry is particularly apparent in disputes where the EU seeks to enforce higher regulatory standards based on precautionary, cultural or ethical grounds. While some of these standards reflect cosmopolitan ideals, such as transnational environmental responsibility or animal welfare, others are considered neo-colonial or protectionist by affected trading partners, particularly those in low- and middle-income countries. From a cosmopolitan perspective, these tensions reveal not also legal inconsistencies; they expose the global power dynamics inherent in rule-based multilateralism. The outcomes of disputes most of the time depend on relative bargaining power and institutional asymmetries, rather than the merits of the public health claims presented.

The EC – Seal Products case is particularly illustrative in this light because while the WTO accepted public morals as a valid basis for trade restrictions, it also demonstrated how difficult it is to apply pluralistic values within a system that demands constant jurisprudence, non-discrimination and scientifically based justification. Meanwhile, the other two disputes analysed in this paper, Biotech and Hormones, revealed the constraints imposed by the narrow construction of scientific sufficiency in the SPS Agreement, which fails to account for evolving or contested scientific knowledge. Ultimately, these disputes demonstrate that WTO law does not adequately accommodate the diversity of legitimate food safety standards, precautionary approaches and public health priorities across jurisdictions. A cosmopolitan trade regime would require respect for local contexts and vulnerabilities, including culturally embedded food preferences and ethical norms, recognition of shared transnational responsibilities – especially with regard to ecological protection and public health risks that transcend borders – and a regulatory approach that balances science, precaution and ethics, rather than defaulting to a uniform model of scientific rationality.

Normative implications and policy reform directions. This article contributes to the growing body of scholarship calling for a rights-based reconfiguration of global food governance. Several normative implications and policy directions emerge: First, food safety should be reconceptualised as a human right, rather than merely a trade concern. This would require revising the WTO SPS Agreement to include references to the right to health, and ensuring that trade rules align with international human rights law. Second, legally integrate One Health into global health and food governance. This could be achieved through new treaties, interpretative declarations or amendments to existing instruments (e.g. the WHO International Health Regulations) to include food safety and the environmental determinants of health.

The ESG agenda should move towards establishing binding obligations. As the article has shown, ESG frameworks currently operate as market-driven accountability mechanisms. However, they have significant normative potential. By incorporating Codex Alimentarius standards, One Health principles, and human rights metrics into ESG reporting, governments and international organisations can promote compliance within the private sector and achieve public objectives. There should be institutional convergence between trade and health governance bodies, including stronger collaboration between the WTO, the Codex, the WHO and human rights institutions. Joint interpretative guidance, cross-referencing standards, and inclusive participation by health and civil society actors

in trade forums would contribute to legal coherence. Global democratic legitimacy can be enhanced through participatory governance. The legitimacy crisis in international law stems from fragmented norms and the exclusion of affected communities from decision-making processes. Cosmopolitan governance requires legal integration, democratic accountability and inclusion.

Towards a Cosmopolitan Vision of Global Food Governance. This article concludes that food safety should be better regulated and that the normative basis of global governance must shift to prioritise health protection – both individual and ecological. This requires us to recognise food safety as a shared human right, embedded in a framework of collective responsibility and legal accountability that transcends borders. Cosmopolitanism provides the ethical and legal framework for this change. It encourages us to move beyond the limitations of state-based governance and articulate a framework in which everyone, regardless of geography or citizenship, has access to safe, nutritious, and ethically produced food. It also requires states and corporations to recognise the interdependencies of human, animal and environmental health, and to accept that the costs of inaction will be shared by all. The road ahead is complex. It involves legal reform, institutional redesign and cultural transformation. However, the convergence of health, environmental, and trade challenges presents a unique opportunity to transition from fragmented, reactive governance to an integrated, preventive, and ethically grounded model. This model would protect health not just as a policy aspiration, but as a fundamental global right.

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