


BOOK REVIEW

Climate Change, Cattle, and the International Legal Order

Melina Moreira Campos Lima 

IBMEC, Brazil

Email: emaildamel@yahoo.com.br

Science has clearly established the direct impact of the livestock industry on climate change. Despite this, the topic has been overlooked in international forums, both politically and in regulatory aspects. The book “Climate Change, Cattle, and the International Legal Order” by Rebecca Williams represents a milestone in addressing the subject within the context of international law, where its development was previously non-existent. Overall, the author has thoroughly researched the international regimes she set out to analyse, which are covered in great detail.

The book aims to fill the existing gap in environmental legal literature concerning livestock by analysing various international legal regimes that influence livestock emissions and identifying methods for achieving mitigation in the sector more equitably through global governance of livestock, with a focus on meat and dairy consumption. The book is structured into six chapters, addressing four key international legal regimes: climate, agriculture, forestry and trade.

Before examining the four regimes, we shall address the first chapter. Although the book focuses on analysing international legal regimes, it explores a specific technical topic that is generally unknown to professionals in international law or politics: livestock farming. Chapter 1 provides an overview of the livestock sector’s history and its environmental impacts, covering intricate topics such as enteric fermentation, methane emissions, manure management and the use of water and land, as well as biodiversity. Understanding these technical aspects is essential for any reader, even those with a law or policy background, to grasp the extent of the environmental impact, the role of meat consumption, and the climate mitigation potential of the livestock sector. These elements form the foundation for comprehending the potential role of international regulation of livestock in the environmental realm. Williams has presented these technical issues in a clear and accessible manner, making them understandable to laypeople, which is one of the book’s strengths.

Chapter 2 discusses the international climate regime. It details the main instruments, focusing on the Paris Agreement, and explains how emissions from the livestock sector are not covered by the regulations. The chapter addresses highly relevant topics, including mitigation, adaptation, agricultural climate finance, Nationally Determined Contributions (NDCs), and the Conference of the Parties (COPs), particularly COP27. It highlights a reluctance to formally tackle emissions from the livestock sector within the climate regime, particularly from a mitigation perspective. The author presents data showing that initiatives aimed at reducing meat and dairy consumption are scarce and are not being led

by developed countries, where consumption tends to be higher and contributes more to emissions from the livestock sector. In short, there has been a reluctance to acknowledge that groups of wealthy and developed countries play a significant role in emissions from the agricultural sector through their consumption.

Chapter 3 examines the Food and Agriculture Organization (FAO). In addition to discussing the organisation's history, Williams details various initiatives related to the livestock sector, including the recognition of this sector as a significant greenhouse gas (GHG) emitter within agriculture. The chapter covers topics such as supply and demand-side mitigation, food security, poverty eradication, sustainable diets, and the FAO's role in the international agrifood regime. While noting that the FAO is one of the few international institutions that acknowledges the need for demand-side strategies to mitigate the environmental impact of livestock farming, such as dietary shifts, the author emphasises that these strategies are typically linked to public health issues.

In this chapter on the FAO, relevant information emerged after the book's publication and therefore could not be addressed by the author. At COP28, the FAO published a report¹ on livestock agrifood systems revising downwards its estimate of livestock's contribution to overall greenhouse gas emissions, which allegedly had methodological problems and contradictions with previous studies conducted by the FAO and independent researchers. Furthermore, two cited authors – Paul Behrens and Matthew Hayek – wrote a joint letter² to the organisation alleging that the report distorted the findings of their studies, presenting estimates of emissions mitigation from dietary changes as up to 40 times lower than the scientific consensus.

Another report shows how the historical strategy of undermining science to keep certain markets unregulated – such as in the case of tobacco – has been used by the livestock industry. In this context, the report includes a case study showing how the FAO has been part of this process. Accusations have arisen regarding how the interests of the livestock industry have shaped the FAO's narrative about the sector's emissions and potential mitigation initiatives, disfavours measures related to reducing meat consumption.³ These developments could lead to a more critical assessment of the FAO's actions than the one presented in the book. Since this information is crucial for understanding the organisation's conduct and its potential role in global governance related to livestock and climate change, readers might consider it a valuable complement to the author's careful analysis, which accurately reflected the knowledge and context available at the time.

Chapter 4 explores the international forestry regime. The author notes that the international framework is fragmented, primarily due to the dominance of the state sovereignty paradigm over natural resources. In addition to detailing how forest protection is addressed by various soft legal instruments and international treaties that do not primarily target forests, the chapter also covers a range of other topics. Among them, we highlight the following: the dynamics and tensions between the global North and South in forest policies, conflicts between forest protection and the agricultural sector, the mitigation of agricultural emissions within the international forestry regime, the land use, land use change, and forestry (LULUCF) sector, the development of REDD+, and a case analysis of Brazil.

One of the book's strengths, particularly evident in this chapter, is the adoption of a perspective that recognises the colonial past of most developing countries. Williams

¹ FAO (2023). "Pathways Towards Lower Emissions: A Global Assessment of the Greenhouse Gas Emissions and Mitigation Options from Livestock Agrifood Systems" available at <https://openknowledge.fao.org/server/api/content/bitstreams/a06a30d3-6e9d-4e9c-b4b7-29a6cc307208/content>.

² P Behrens and M Hayek, *Letter to FAO*, 2024 available at <https://www.universiteitleiden.nl/binaries/content/assets/science/cml/essays/retraction-request-pathways-to-lower-emissions.pdf>.

³ Changing Markets Foundation, "The New Merchants of Doubt: The Corporate Playbook by Big Meat and Dairy to Distract, Delay and Derail Climate Action", 2024.

affirms their right to govern their own forests and highlights how developed countries have accumulated significant wealth from the natural resources of the global South. This would explain the scepticism in developing countries regarding proposals from the global North to regulate forests. When addressing the REDD+ program, Williams explains that the focus is on farmers rather than consumers. This neglects the impact of high consumption of agricultural products, such as soy, by developed regions like the European Union. The author notes it represents a continuation of the pattern observed in the other regimes analysed so far, which assign complex structural changes to developing countries despite the significant role of developed country consumption in environmental and climate impacts.

Chapter 5 delves into the international trade regime with a focus on agriculture. Like the other chapters, the text is very detailed, reflecting the complexity of the agreements – especially the Agreement on Agriculture (GATT) –, the WTO dispute settlement system, and the exceptions to the application of rules. Williams points out that international trade liberalisation in agriculture is generally associated with increased GHG emissions and deforestation in regions such as the Amazon, which would be detrimental to climate mitigation objectives. Although there is growing attention to what are called “non-trade issues” in the international trade regime, such as food security and environmental protection, the author emphasises that there is an inevitable tension between the WTO’s objectives of liberalisation in the field of agriculture and climate mitigation objectives.

Williams explains that the international trade regime has a comparatively better capacity to enforce its legal rules than other regimes, identifying legal avenues for taking measures to comply with regulations related to agriculture and the environment. However, she notes that, although the Agreement on Agriculture (GATT) is actionable under the WTO dispute settlement procedure, no case related to the environment has been brought before the WTO’s appellate body to date. Despite recognising the theoretical possibility of the organisation addressing environmental issues related to livestock, Williams emphasises that the primary purpose of the Agreement on Agriculture is to promote production and trade, making it unlikely that environmental concerns regarding the consumption of livestock goods will be central.

The sixth chapter concludes the book. In addition to categorising approaches for cattle and climate change and recapping common themes across the international legal order, Williams discusses the issue of affluence and proposes a partial reconceptualisation of the principle “Common but differentiated responsibilities and respective capabilities” (CBDRRC). The author emphasises that emissions from agriculture are primarily addressed from the perspective of food security or adaptation. She argues that discussions about climate mitigation in agriculture often overlook affluence. According to the author, affluence refers to the role played by wealthy actors – whether developed countries or affluent groups within developing countries – in driving emissions from the agricultural sector through consumption levels that are significantly above average, particularly of animal-based foods. However, neglecting affluence would be incompatible with the CBDRRC principle and the need to consider the growing global middle class, which tends to consume more meat and contribute to increased agricultural emissions.

In her proposal for a partial reconceptualisation of the CBDRRC principle, Williams explains that the UNFCCC system allocates responsibility to the production system and notes that it is essential to recognise consumption as a driver of emissions. As a result, the contribution of livestock emissions would not be limited to inefficient production systems in developing countries; it would also include the consumption and mitigation responsibilities of wealthier actors. In this latter scenario, it would also encompass affluent consumers in developing countries. Finally, the author concludes the book by acknowledging that affluence is a significant factor in the climate crisis across all sectors, not just livestock.

Overall, this is a well-researched and well-written book that fulfils its aim of beginning to address the gap that exists regarding the intersection of livestock farming, climate change and international law and policy. Williams' work contextualises the necessity highlighted by the natural sciences to address meat and dairy consumption within the framework of political and legal science, which was something scarcely addressed in the political field and entirely undeveloped in terms of international law. It is undoubtedly a foundational book for professionals in international law and international politics who wish to become familiar with the subject or engage in the field of global food transition, which is set to gain increasing prominence in the context of international environmentalism.