

Chapter 59

Livestock and Climate Change: An Analysis of Media Coverage in the Sydney Morning Herald

Xavier Mayes
Curtin University, Australia

ABSTRACT

A global shift away from diets dominated by meat, dairy and eggs to mainly plant-based diets is as necessary in mitigating anthropogenic climate change as the shift away from fossil fuels. Yet a large awareness gap exists about animal agriculture's contribution to greenhouse gas emissions. Recent studies in Australia and the United States show this issue is represented in less than 1 percent of all newspaper articles about climate change. This chapter examines the opportunities and barriers in addressing the livestock sector's impact on climate change. Policy recommendations in the literature are compared with the responses of governments, industry and the NGO sector. Australia's unique socioeconomic and cultural ties to livestock production and the consumption of animal products represent a significant barrier to demand-side mitigation. An analysis of newspaper articles mentioning animal agriculture's link to climate change in The Sydney Morning Herald between 2006 and 2014 provides insights into the facilitation and shaping of public awareness on the issue to date. The findings can inform strategies to increase future media coverage and encourage a more engaged discourse on demand-side mitigation.

INTRODUCTION

Humans are “eating away at our own life support systems” at a rate unseen in the past 10,000 years (Milman, 2015). Population growth, rising incomes and continuing urbanisation are changing the nature of our food and agricultural systems (Hoffman, 2013). The human population on this planet will continue growing to an estimated 9.6 billion in 2050 (UN, 2013). World meat production has doubled in the past three decades. In that same time it has tripled in the global South, pointing to the rapid changes in the diets of populations in developing countries (Cudworth, 2011, p. 106). Demand for meat and milk in particular is projected to increase by 73 percent and 58 percent respectively by 2050 (Gerber et al., 2013). Based on recent estimates, meeting the demand will require increases of between 60 and 100 percent in

DOI: 10.4018/978-1-5225-0803-8.ch059

cropland and pasture-based food production (Alexandratos & Bruinsma, 2012; Porcher, 2006), placing further strain on land, water resources, biodiversity and native forests (Steinfeld et al., 2006).

The world-wide production of meat and other animal-based products is a significant driver of climate change (Steinfeld et al., 2006). Current estimates of global livestock emissions along the supply chain range from 14.5 to 51 percent (Gerber et al., 2013; Goodland & Anhang, 2009). In 2010, an international agreement was reached stating greenhouse gas emissions need to be reduced so that average global temperatures increase no more than two degrees Celsius above pre-industrial times (UNFCCC, 2014). To reach this goal the growth in carbon dioxide emissions, the most prevalent of anthropogenic greenhouse gases, must be quickly contained. Yet immediate and drastic measures to decarbonise world economies will be prohibitively costly (Stehfest et al., 2009) and any response within the climate system will not occur for decades unless the more powerful and short-lived greenhouse gas methane is given equal consideration (Shindell, 2013). Achieving the two-degree target will be impossible if world economies only focus on energy and transportation. Serious measures to address agricultural emissions, specifically from livestock, will also be essential (Hedenus, Wirsenius & Johansson, 2014). A growing body of evidence suggests a global shift away from diets dominated by meat, dairy and eggs to mainly plant-based diets is as necessary in mitigating anthropogenic climate change as the shift away from fossil fuels (Bailey, Froggatt & Wellesley, 2014; Popp, Lotze-Campen & Bodirsky, 2010; Stehfest et al., 2009). Turning around the rising global consumption of animal products through significant changes to dietary practices will have profoundly positive consequences for the planet's climate, biodiversity and natural resources (Raphaely & Marinova, 2014b). Human health and equity, as well as the welfare of farmed animals, will also dramatically improve.

Despite these benefits, efforts by governments, industry and advocacy groups in developed nations to address the impact of animal agriculture on climate change have been limited, particularly in encouraging less consumption of animal-derived food and other products. There is a wide awareness gap concerning animal agriculture's significant contribution to climate change. A global survey found that twice as many people think transport is the bigger contributor (Bailey et al., 2014). Closing this awareness gap is a crucial prerequisite to behavioural change. As a wealthy, developed country with a high level of ingrained meat consumption and a powerful livestock industry, Australia faces significant barriers to the wide acceptance of effective solutions. Despite the news media's fundamental role in both public communications and agenda-setting (Schmidt, Ivanova & Schäfer, 2013), reportage on this issue in the country's major newspapers has been disproportionately low in recent years when compared with other climate change topics (Friedlander, Riedy & Bonfiglioli, 2014).

BACKGROUND

Below is a short discussion of the major impacts of livestock production. This sector is a key driver of climate change.

Major Impacts

Livestock production is one of the most destructive human activities on the planet. It directly and indirectly uses 30 percent of the entire ice-free terrestrial surface of the planet and 70 percent of all arable land (Gerber et al., 2013). One fifth of pastures and rangelands have been at least partly degraded by soil

29 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/livestock-and-climate-change/165345

Related Content

Status and Opportunities for Forest Resources Management Using Geospatial Technologies in Northeast India

Kasturi Chakraborty, Thota Sivasankar, Junaid Mushtaq Lone, K. K. Sarma and P. L. N. Raju (2020). *Spatial Information Science for Natural Resource Management* (pp. 206-224).

www.irma-international.org/chapter/status-and-opportunities-for-forest-resources-management-using-geospatial-technologies-in-northeast-india/257704

Geo-Spatial Technology for Land Resources Management in Nigeria

Ugonna Chimnonyerem Nkwunonwo (2020). *Spatial Information Science for Natural Resource Management* (pp. 62-87).

www.irma-international.org/chapter/geo-spatial-technology-for-land-resources-management-in-nigeria/257697

On the Use of Different Presentation Formats in an Exhibit at a Science Center to Communicate Sea Level Rise

Subramaniam Ramanathan and Kenneth Feinstein (2017). *Natural Resources Management: Concepts, Methodologies, Tools, and Applications* (pp. 831-851).

www.irma-international.org/chapter/on-the-use-of-different-presentation-formats-in-an-exhibit-at-a-science-center-to-communicate-sea-level-rise/165323

Extraction of Urban Targets Using Fusion of Spectral and Shape Features in AVIRIS-NG Hyperspectral Data: Use of Hyperspectral Data for Detecting Roads and Roofs

Shalini Gakhar and K. C. Tiwari (2024). *Advanced Geospatial Practices in Natural Environment Resource Management* (pp. 167-188).

www.irma-international.org/chapter/extraction-of-urban-targets-using-fusion-of-spectral-and-shape-features-in-aviris-ng-hyperspectral-data/342216

The Political Ecology of the Decentralized Water Management in Zimbabwe: Theory and Empirical Evidence From Sanyati Catchment Area

Winmore Kusena (2022). *Handbook of Research on Resource Management and the Struggle for Water Sustainability in Africa* (pp. 225-238).

www.irma-international.org/chapter/the-political-ecology-of-the-decentralized-water-management-in-zimbabwe/295932