

# 1 Introduction to the Global Meat Industry: Expanding Production, Consumption, and Trade

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Over the past five decades, the global meat industry has emerged as one of the most important factors shaping our lives and the world around us. Yet, the expanse of this industry can be difficult to see precisely because of its wide reach. The production and consumption of meat has reached such a global scale that a hamburger can link together people and businesses across the globe: genetically engineered soybeans from U.S.-based Monsanto, a soybean farmer in Brazil, a cattle farmer and a slaughterhouse worker in Australia, and a consumer at McDonald's in Japan. The expanding reach and interconnection of this industry across the globe has been driven by new trade policies that have encouraged a growth in global trade, government subsidization of specific crops, and corporations, including ADM, Cargill, Monsanto, JBS, WH Group Limited, and Tyson Foods Inc. This growth in the meat industry has brought with it several potential consequences that threaten to worsen a variety of social and environmental issues already seen as problematic: climate change, clean water supplies, food insecurity and world hunger, consumers' health, workers' rights and well-being, and the treatment of animals. Consequently, understanding the new realities of the global meat industry is of paramount importance.

Many questions arise in grappling with the global expansion in the meat industry. What forces have driven the expansion of the global meat industry? What role have corporations played, and how powerful are these businesses? Have national governments supported or limited the expansion in the meat industry? How has this global expansion contributed to the adoption of industrial production methods in raising animals—chickens, cows, pigs, and even fish—and what have been the consequences

for the environment and the animals themselves? What has the increased size and global reach of corporations meant for the working conditions of slaughterhouse workers and the independence of farmers? What opportunities exist for production that is more sustainable for the environment and that recognizes the important ethical concerns related to animals and workers?

The chapters that follow in this book address these questions by drawing on concrete examples. This book brings together scholars with expertise in different dimensions of the complex web of the global meat industry: corporate concentration and power; industrial production of animals and fish; meat production in Africa, Asia, and North and South America; greenhouse gas (GHG) emissions from livestock; environmentally sustainable production by small-scale farmers; and the experiences of workers in processing plants. While focusing on this range of issues, three themes cut across the chapters. First, governments and corporations have important roles in shaping the structure of the global meat industry. Second, increasing meat consumption for a growing global population can create a fundamental contradiction: despite rising meat production and consumption, there is a threat to food security for many smallholders and other people around the world. And third, the global meat industry contributes to social and environmental injustice as it relates to people, land/territory, and animals. The chapters in this book help to highlight these issues in the global meat industry.

First, governments and corporations have each played a central role in the expansion of the global meat industry. The value of this global meat production has increased from about \$65 billion (in constant 2004–2006 US\$) in 1961 to \$366 billion in 2014—an increase of more than 500 percent.<sup>1</sup> A handful of corporations have come to dominate the meat industry as it expanded over the past five decades. Today, three corporations are particularly noteworthy: JBS (Brazil), WH Group (China), and Tyson (United States). Each of these corporations has received substantial subsidies from their respective governments (see chapter 2). The wide reach of such corporations, with the help of governments, has undermined the potential for democratic or local control over food supply.

Second, the expansion of the global meat industry has reflected, though clearly outpaced, the planet's increasing human population. From 1960 to 2016, the world's population increased from 3 billion people to 7.4 billion

people, an increase of almost 150 percent. At the same time, the global production of meat during the same period increased from about 45 million metric tons (MMT) to 259 MMT, or an increase of more than 500 percent. As the population increased, annual per capita meat consumption doubled from 20 kg per year in 1961 to 40 kg per year. Thus, the global meat industry has provided one possible avenue for feeding the world's growing population. However, we demonstrate in this volume that this solution has undermined food security because of the corporate control and centralized economic power in the meat industry as well as in the concomitant expansion of feed grain production (e.g., Turzi 2017; Winders 2017).

Third, the global expansion of the meat industry has contributed to several problems, including more dangerous conditions for workers, environmental degradation, and harmful treatment of animals. In its expansion, the meat industry has adopted production techniques that have increasingly put workers at risk in terms of their health and their economic well-being. The industry has also developed intensive production models that rely on housing and raising animals in more concentrated settings, creating stressful and unhealthy conditions for animals and neighboring communities. These intensive methods also pose threats to the environment as water usage increases, on the one hand, and water sources become threatened by pollution from animal waste, on the other hand. The increasing number of animals in the meat industry has also meant the need for more land for raising and housing animals, grazing some animals, and feed grain production. Thus, this expanding industry has also threatened the access to land for small farmers and peasants across the global (e.g., Lapegna 2016). Such production techniques have been adopted and spread across the globe—from the United States to Brazil to China—thereby prompting the proliferation of these problems for workers, smallholders, animals, and the environment.

Before turning to the chapters and the discussions of these issues, let us put into perspective what we mean when we say “the global meat industry has changed over the past several decades.” This will provide the backdrop for the chapters that follow. Specifically, we will outline the global patterns in meat production, consumption, and trade (exports/imports). More importantly, we will consider what such trends tell us about the scope and impact of the meat industry today.