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Claremont McKenna College

Factory to Table: A Philosophic Analysis of the Justice or Lack Thereof of  
Agricultural Markets

Submitted to

Professor Rajczi

By

Will Carter

For

Senior Philosophy Thesis

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## **Acknowledgments:**

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Finally, I would like to thank Laura D'Asaro, the founder and CEO of Chirps. Last summer, I had the pleasure of interning at Chirps, which sells sustainable food products made from crickets. This experience revealed to me how difficult it is to alter what people eat. Moreover, it revealed how difficult it is to morally navigate a food system that *incentivizes* immoral behavior. Yet, Laura has unwaveringly moved forward in pursuit of Chirp's mission, and has inspired me to do the same with my passions.

**Abstract:**

How food is produced has dramatic consequences on how we live, our world's justice, and the future of our planet. In a world increasingly driven by neoliberalism, agricultural markets have been incentivized to industrialize, globalize, and consolidate. This has resulted in the global dominance of a new type of agriculture, industrial agriculture, driven by the market logic of lowering costs and raising profits. Industrial agriculture has undoubtedly generated the profound benefit of cheaper, more plentiful food in much of the world. These favorable innovations lead many scholars to argue that free markets produce the most just and efficient arrangements for agriculture. Yet, critics of industrial agriculture point to the harmful societal and environmental effects of industrial agriculture as evidence of grave injustice. Both groups feel strongly about their positions and warn of apocalyptic effects if the ideals of the other group are adopted by the agriculture industry or regulative bodies.

In this thesis, I assess the strength of the major arguments given by both parties. I use a combination of philosophical reasoning, empirical data, and the realities of industrial agriculture to evaluate these differing standards of justice. After analyzing these arguments, I sketch my own conception of agricultural justice. Ultimately, my standards of justice seek to reconcile efficiency with fairness. In today's world, participation in agricultural markets is obligatory. The justice of these markets influences the justice of every human life. Therefore, it is pertinent that agricultural justice is assessed with the strictest scrutiny. The following thesis is that scrutiny.

<b><u>Table of Contents:</u></b>	<b><u>Page #</u></b>
ABSTRACT.....	2
ACKNOWLEDGMENTS.....	3
TABLE OF CONTENTS.....	4
INTRODUCTION.....	6
THE ADVENT OF INDUSTRIAL AGRICULTURE.....	6
INTRODUCTION TO THE INDUSTRIAL AGRICULTURE DEBATE.....	8
MOVING FORWARD.....	10
CHAPTER 1.....	11
MARKET FUNDAMENTALISTS.....	11
INDUSTRIAL AGRICULTURE CRITICS.....	15
CHAPTER 2.....	18
COMPETITIVE MARKETS.....	18
THE UNREALIZED ETHICAL DEMANDS OF CONSUMERS.....	20
MONOPOLISTIC TENDENCIES.....	22
ADAM SMITH AND SELF-INTEREST.....	25
RETHINKING JUSTICE IN THE MARKET.....	27
COMPARATIVE ADVANTAGE.....	30
INNOVATION AS JUSTICE.....	33
VARIED AGRICULTURE, VARIED SOLUTIONS.....	34
CHAPTER 3.....	35
GOALS OF CHAPTER 3.....	35
MORAL RESPONSIBILITY.....	36

THE DEVELOPMENT DILEMMA.....	40
SUSTAINABILITY AS JUSTICE.....	42
SOCIAL JUSTICE AS JUSTICE.....	43
CONCLUSION.....	46
THESES SUMMARY.....	46
THE FUTURE OF INDUSTRIAL AGRICULTURE.....	48
WORKS CITED.....	49

## **Introduction:**

### **The Advent of Industrial Agriculture:**

For millions of years, our ancestors traveled the globe in search of food. When they found a meal, they performed the duties of the inspector, the butcher, the chef, and hopefully the consumer. The value of food was directly related to its ability to satiate. Our hunter-gatherer ancestors likely lived lives of relative abundance. This abundance was even able to support a rich world of social structures, religious beliefs, and political activities. However, they lived at the mercy of nature, their less than benevolent and unpredictable master. This changed about ten thousand years ago when humans attempted to control nature. They began domesticating plants and animals, manipulating nature to meet their needs. The advent of agriculture completely reshaped human life. Agriculture offered humans the opportunity to settle down and live what they believed would be the safer and more nourished lives of peasants. Yet, history reveals that peasants generally lived more laborious and miserable lives than their hunter-gatherer ancestors. For each problem agriculture solved, it produced many more. Disease, poor diet, war, famine, and greedy elites were just a few of the devastating consequences of agriculture and the lifestyle it brought about.<sup>1</sup> Yet, our peasant ancestors could not escape the village walls they had built. They were no longer equipped for survival in nature. Overall, it wasn't humans who domesticated agriculture, but agriculture that domesticated us.

Thenceforth, humans have sought new technologies, methods, and tools that have made our lives more bearable. This desire is best exemplified by the Industrial Revolution that occurred in Britain and the United States between 1760 and 1830. This period saw a dramatic shift towards machine production, the factory system, and countless innovations that changed the daily lives of

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<sup>1</sup> Harari, Yuval Noah. "History's Biggest Fraud." *Sapiens: A Brief History of Humankind*. Vintage, 2019.

humans forever. The Agricultural Revolution that occurred during the same time is less recognizable but arguably just as important. The Agricultural Revolution largely originated in Britain and was marked by an unprecedented increase in agricultural productivity due to innovations in agricultural production methods. Some of the most notable innovations were crop rotation, selective breeding, and the use of new machinery and animals on farms. From 1700 to 1850, farm output almost doubled in the Western world. This increased efficiency enabled a few farmers to do the work that used to require many. Thus, many farmers departed to the industrializing urban centers that were being sustained by the surplus food from these productive farms.<sup>2</sup>

At the same time this material revolution was occurring, a scholarly revolution was responding to the prosperous conditions industrialization brought about. Philosophers and economists like Adam Smith popularized the idea of a free market that was “self-regulated” by supply and demand. The idea was that individuals and firms that pursue their self-interest and the maximization of profits will lead, as if by an invisible hand, to general societal well-being.<sup>3</sup> The market economy is governed by the goals of efficiency, profit, and liberty - the same goals that fostered the Industrial Revolution.<sup>4</sup> A market economy, in theory, allows individuals to make their own choices, shape their own destinies, and consent to all chains of reliance they subject themselves to. A market is man’s attempt to experience a taste of the state of nature, his chains loosened, yet still enjoying the increased standard of living from man’s collaborative efficiency. Many farmers, incentivized by these market’s goals, embraced this shift to a free market economy. To compete with other farmers, they needed to reduce costs and increase profits. To do

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<sup>2</sup> “Agriculture in the Industrial Revolution - The Industrial Revolution - KS3 History Revision - BBC Bitesize.” *BBC News*, BBC.

<sup>3</sup> Smith, Adam. *The Wealth of Nations*. Seven Treasures Publications, 2009.

<sup>4</sup> Ross, Sean. “What Is the History of the Market Economy?” *Investopedia*, Investopedia, 28 Aug. 2020.

so, they began applying a broad class of industrial techniques, tools, and technologies to their farms. This was the birth of industrial agriculture. Today's industrial agriculture is characterized by "genetic engineering, chemical fertilizers, pesticides, expensive machinery, large plantations of genetically identical organisms, market dominance of concentrated agribusinesses and tech companies, and farmers who act like factory managers".<sup>5</sup> Industrial agriculture has undoubtedly produced the profound benefit of cheap and plentiful food in many parts of the world. However, many critics believe that the industry's tendency to monopolize as well as its harmful effects on consumer health, the environment, and the economies of developing countries make strict regulation of it imperative. Food is unlike other market commodities. How it is produced shapes our social organization, distributive outcomes, and the overall health of the future world. As a result, scholars have fervently debated what standards agriculture production should follow. Both sides of the debate want the most just and efficient political arrangements for the agriculture industry. Yet, their proposed methods for reaching this state could not be more different.

### **Introduction to the Industrial Agriculture Debate:**

On one side of this debate are the market fundamentalists. Market fundamentalists argue that unregulated markets produce the most mutually and socially beneficial outcomes. These mutually and socially beneficial outcomes, according to the market fundamentalist, make markets the most just and efficient way to organize the globe. Critics of industrial agriculture argue that markets for industrial agriculture favor multinational corporations while devastating small farms, consumers, the global poor, and the environment. Critics thus push for stricter regulation to minimize the harmful effects of agricultural industrialization.<sup>6</sup> The debate is particularly

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<sup>5</sup> Shahar, Danny. "Public Justification and the Politics of Agriculture." *Oxford Handbooks Online*, Edited by Anne Barnhill et al., 15 Mar. 2018.

<sup>6</sup> Powers, Madison. "Food, Fairness, and Global Markets." *Oxford Handbooks Online*, Edited by Anne Barnhill et al., 11 Jan. 2018.

important for a few reasons. First, both sides believe that the adoption of their opponents' policies would result in globally catastrophic effects. Market fundamentalists see regulation of the agriculture market as a direct path to famine, particularly endangering the global poor. For the 2 billion people making under \$2 per day, food accounts for 50-80% of their budget.<sup>7</sup> They argue that any increase in price or decrease in production would have Malthusian consequences where food production is unable to catch up with population growth, especially for these disadvantaged individuals. Adversely, critics of industrial agriculture warn of the precarious position we accept in exchange for increased short-term productivity. They argue that multinational corporations that have been allowed to dominate industrial agriculture because of its extremely high barriers to entry endanger our production quality, safety, and ethics. Furthermore, they argue that the pursuit of short-term profits ignores future threats to our environment, health, and wealth distribution. These debates might seem like abstract thoughts with fictitious characters. Yet, they have been transpiring on the world stage, polarizing developing and developed countries.

Most developed countries insist on policies that rely on market forces to guide agricultural trade and policy. Market forces dictate that developing countries become the suppliers of raw agricultural inputs for large buyers in developed countries. This emphasis on agriculture in developing countries prevents industrialization, encourages exploitation of labor and nature, and renders developing countries subordinate to global price shocks and the whims of business elites. Less developed countries argue that reliance on market forces often conflicts with a variety of social welfare policies and practices, especially those intended to reduce hunger, malnutrition, and food insecurity. A lack of agricultural tariffs to protect domestic farmers, often a condition of IMF

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<sup>7</sup> Powers, Madison. "Food, Fairness, and Global Markets."

loans, prevents farmers in developing countries from competing effectively, ultimately undermining their food market's foundation.<sup>8</sup>

Overall, a market-driven agriculture industry that favors industrial production may be able to feed our world's growing population. However, industrial production has serious social and material consequences. Therefore, to produce the most just and beneficial outcomes and systems, we must carefully analyze arguments from both sides of the debate.

### **Moving Forward:**

In Chapter One, I will be introducing the major views within the industrial agriculture debate. Chapter One is meant to introduce readers to the state of industrial agriculture today as well as layout the major conclusions surrounding its justice. In Chapter Two, I will take the various conclusions introduced in Chapter One and trace their arguments. By analyzing their logical steps within the context of the realities of the present-day agricultural market, I will be able to point out the major flaws and merits of the major arguments. Finally, in Chapter Three, I will sketch my own framework of justice within the agricultural market. I will deduce who is morally responsible for actualizing these just arrangements as well as outlining several conditions these arrangements should satisfy.

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<sup>8</sup> Powers, Madison. "Food, Fairness, and Global Markets."

## **Chapter One:**

### **Market Fundamentalists:**

The idea that unfettered and competitive markets produce the most mutually and socially beneficial outcomes is the foundation of neoliberal thought. Free markets are markets with none to little government regulation. Competitive markets are markets where many producers sell similar products to many consumers. Proponents of free and competitive markets, such as Robert Nozick and Milton Friedman, frequently argue on the basis that a free and competitive market is conducive to promoting individual liberty, which they argue is the primary goal of a market economy. However, proponents of a free agricultural market propose a different goal. To these individuals, the primary goal of agriculture markets is to feed the world. By 2100, the world's population is predicted to grow to over 10 billion.<sup>9</sup> This will result in a dramatic increase in the demand for food. Failure to meet this demand would lead to countless deaths, likely accompanied by wars, famines, and societal collapses. Thus, the most important question for market fundamentalists is how will the world supply this increased demand for food. Their answer lies in the market.

Proponents of a market-driven approach to solving world hunger argue that supply must catch up to the demand for food. They suggest this can be accomplished by encouraging industrial and technological innovation aimed at increasing farm productivity, privatizing state agricultural industries, and removing tariffs and other restrictions on global and national trade.<sup>10</sup> These policies are popular amongst international institutions like the World Bank, the International Monetary Fund, and the World Trade Organization.<sup>11</sup> Overall, these policies assume that a

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<sup>9</sup> Borlaug, Norman E., and Christopher R. Dowsell. "Feeding A World of 10 Billion People: Our 21st Century Challenge." Pages 31–56.

<sup>10</sup> Shahar, Danny. "Public Justification and the Politics of Agriculture."

<sup>11</sup> Donnan, "Trade Talks Lead to 'Death of Doha and Birth of New WTO' "; and Watkins, "What Next for Poor Countries Fighting to Trade in an Unfair World?"

reliance on market incentives to lower costs and increase production will ultimately result in cheaper and more plentiful food.

Arguably the most revered supporter of industrial agriculture is Norman Borlaug. Borlaug claims that failure to support industrial agriculture through market-driven policies, “will be negligent in our duty and inadvertently may be contributing to the pending chaos of incalculable millions of deaths by starvation”.<sup>12</sup> Borlaug, a forester and agronomist, believes that a market-based approach to solving world hunger is most effective through technological innovation. It is no surprise that he is most well known for his work introducing high-yield GMO varieties of wheat and industrial techniques to Mexico, India, and Pakistan. Through this work, Borlaug helped avert severe famines in these countries and is believed to have saved over a billion lives. In 1970, he was awarded The Nobel Peace Prize for this achievement.<sup>13</sup>

Borlaug further argues that we have three options for increasing food production: expanding farmland area, increasing the frequency of planting, or raising crop yields. He concedes that expanding farmland area is challenging because of the lack of available uncultivated land and the danger of soil erosion. Thus, he contends that all efforts should be focused on increasing the frequency of planting and especially raising crop yields through agricultural biotechnology. Agricultural biotechnology is the use of technological and scientific tools and processes to manipulate the traits of plants and animals. Borlaug claims that the biotechnology to prevent famine is available but has not been properly implemented. Environmentalists have strongly opposed the use of biotechnology, specifically chemical fertilizers and GMOs, because of their proposed harmful effects on the health of consumers and

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<sup>12</sup> Borlaug, Norman E. “Ending World Hunger. The Promise of Biotechnology and the Threat of Antiscience Zealotry.” *Plant Physiology*, vol. 124, no. 2, 2000, Pages 487–490.

<sup>13</sup> Vidal, John. “Norman Borlaug: Humanitarian Hero or Menace to Society?” *The Guardian*, Guardian News and Media, 1 Apr. 2014.

ecosystems. Oppositely, Borlaug insists that environmentalists have prevented the modernization of developing countries by discouraging investment in developing countries' agricultural industrialization. In fact, he claims that biotechnology is our best chance to develop agriculture sustainably because of its ability to alter the ways plants interact with the environment. Borlaug, like many market fundamentalists, agrees that the development of our agricultural systems must emphasize sustainability. However, he sees these sustainable developments as coming from the market for technological and scientific innovations. Additionally, Borlaug argues in a Rawlsian manner that the most just thing to do is to introduce these high-efficiency technologies to the people who need them most in the developing world. Research, development, and implementation of biotechnology disproportionately takes place in developed countries.<sup>14</sup> Thus, Borlaug believes that to realize the just distribution of agricultural goods, these technologies should be used to industrialize developing nations.<sup>15</sup>

There are tremendous inequities between the developed and developing world's agriculture. Developing countries often lack access to modern technology and struggle with building transportation and production capacity. These factors render their agriculture industries unable to effectively feed their large populations. Moreover, around 90 percent of the projected population growth is expected to occur in developing countries, where most of the world's hunger already exists.<sup>16</sup> Borlaug has insisted that we introduce biotechnology to these developing countries. Yet, the more popular claim from supporters of industrial agriculture is that "rapid integration of less developed countries in to global markets is essential to increase the rate of economic growth, relieve severe poverty, and reduce hunger and food insecurity".<sup>17</sup> In simpler

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<sup>14</sup> Borlaug, Norman E., and Christopher R. Dowsell. "Feeding A World of 10 Billion People: Our 21st Century Challenge."

<sup>15</sup> "Biotechnology FAQs." *USDA*, US Department of Agriculture.

<sup>16</sup> Borlaug, Norman E., and Christopher R. Dowsell. "Feeding A World of 10 Billion People: Our 21st Century Challenge."

<sup>17</sup> Powers, Madison. "Food, Fairness, and Global Markets."

terms, developed nations should trade with developing nations. The central theory underpinning the effectiveness of this claim is comparative advantage.

Comparative advantage states that nations should specialize in the production of goods which they can produce effectively and at a lower cost than other nations. They should then trade their surplus of these goods for goods that other nations possess a comparative advantage in.<sup>18</sup>

Both parties participating in this kind of trade are mutually advantaged as they are better off than they would be having not participated. In fact, comparative advantage is a guiding principle of the World Trade Organization. The WTO's Constitution lists one of their central goals is to promote "reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade".<sup>19</sup> Developing nations possess a surplus of agricultural inputs.<sup>20</sup> Therefore, advocates of global agricultural markets claim that developing nations possess a strong comparative advantage in the production of food that has largely been unrealized by the global market. If realized, global trade would provide developing nations immediate and widespread economic benefits. This would satisfy the market fundamentalist's criteria for socially beneficial outcomes.

In sum, market fundamentalists, in advocating for industrial agriculture, argue that a free market leads to the most mutually and socially beneficial outcomes. The primary good achieved from the market is cheap and plentiful food. Some individuals like Norman Borlaug argue that scientific and technological advancements must be shared with developing countries for the benefits of market reliance to be justly distributed. Yet, the dominant market fundamentalist theory simply relies on the theory of comparative advantage to argue that the inclusion of

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<sup>18</sup> Mill, James. "Introduction: The Subject - It's Limits - and Division." *Elements of Political Economy*, Department of Economics, McMaster University, 2004.

<sup>19</sup> WTO, "Preamble to the Marrakesh Agreement Establishing the World Trade Organization."

<sup>20</sup> Powers, Madison. "Food, Fairness, and Global Markets."

developing countries in the global agricultural market would meet their standards of justice, providing mutual and socially beneficial outcomes.

### **Industrial Agriculture Critics:**

On the other side of the debate are the critics of industrial agriculture. Critics argue that market fundamentalists underestimate how common market failures are in agricultural markets and their tendency to produce unfair outcomes. Market failures are when certain aspects of a market render it uncompetitive and thus make it inefficient and unable to produce socially and mutually beneficial outcomes. The two most common market failures they cite are excessive control of market power as well as negative externalities caused by industrial agriculture such as harm to consumers and ecological health. Critics take their argument a step further than discounting market fundamentalism's claim of mutually and socially beneficial outcomes. They question if mutually and socially beneficial outcomes truly satisfy the condition of market fairness and justice. Markets tend to create pockets of deep disadvantage, especially in global markets. While benefits may be mutual, both power and benefits are sure to be vastly unequal.<sup>21</sup>

To start, I will begin with the critique of industrial agriculture that most people are probably most familiar with. Industrial agriculture's effects on the environment have become public knowledge in the last few decades. Countless documentaries and novels have detailed the horrific effects industrial agriculture has on our natural world. When agriculture is driven only by the market consideration of price, ethical considerations such as environmental protection are often counter to market logic.<sup>22</sup> Thereby, industrial agriculturists have sought to raise production and cut costs with little thought of the environmental damage their new production methods have caused. The environmentalist's main argument is that market forces value short-term thinking,

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<sup>21</sup> Powers, Madison. "Food, Fairness, and Global Markets."

<sup>22</sup> Long, Michael A. "Christian Coff: The Taste for Ethics: An Ethic of Food Consumption." *Journal of Agricultural and Environmental Ethics*, vol. 22, no. 6, 2 Jan. 2006, Page. 1–30.

where environmental protection requires thinking about the future.<sup>23</sup> Environmental protection is crucial if we want to continue to have enough food to feed the world. Therefore, agricultural markets require regulation to protect against this pitfall of the market.

Foremost, anti-industrialists argue that industrial agriculture poses a threat to the competitive quality of the industry. Currently, only 6 multinational corporations control over 60% of the global agricultural input market.<sup>24</sup> When markets monopolize or consolidate, they fail to produce efficient outcomes because a few actors are unilaterally able to affect the prices they charge and pay. Not only are monopolies able to dictate pricing, they are often incentivized to offer lower quality products because they have no one to compete with. Even more, they are able to influence policy because of their vast economic power. These facts seem to undermine the expected mutuality and the promise of overall social benefit that market fundamentalists claim makes free agricultural markets just.<sup>25</sup>

Lack of domestic competition within the agriculture industry is not the only fear of anti-industrialists. The global character of the agriculture market can, critics of industrial agriculture warn, produce exploitative relationships between countries that jeopardizes the justness of global markets, particularly the principle of mutual benefit. As I've stated before, developing countries often have a competitive advantage in producing raw materials for agricultural production. Yet, raw materials have the lowest profit margins and are sold to developed countries where the processing facilities and the stores they are sold to make far higher profit margins.<sup>26</sup> This emphasis on agriculture and not production also encourages

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<sup>23</sup> James, Harvey S. "Sustainable Agriculture and Free Market Economics: Finding Common Ground in Adam Smith." *Agriculture and Human Values*, vol. 23, no. 4, 2006, Page. 427–438.

<sup>24</sup> Wöstmann, Alexander. "Six Multinational Companies Dominate the Agricultural Input Market." *Six Multinational Companies Dominate the Agricultural Input Market - Alexander's Gas and Oil Connections*, Alexander's Gas and Oil Connections, 26 July 2011.

<sup>25</sup> Powers, Madison. "Food, Fairness, and Global Markets."

<sup>26</sup> De Backer and Miroudot, "Mapping Global Value Chains"; and Wever et al., "Supply Chain-Wide Consequences of Transaction Risks and Their Contractual Solutions."

deindustrialization within developing countries that could benefit from industrializing. Furthermore, profitable export industries make agriculture produced for local populations harder to exist. Thus, domestic consumers must rely on imported food, rendering them vulnerable to global price shocks.<sup>27</sup> Ultimately, a reliance on market forces to dictate the organization of the global agriculture trade tends to favor developed countries that have greater industrial and infrastructural capacity.

In sum, critics of industrial agriculture believe that market fundamentalists underestimate how common market failures are and their tendency to produce unfair outcomes. Environmental degradation, monopolistic tendencies, and exploitative global relationships are all characters of the agriculture market that threaten its ability to produce mutual and socially beneficial outcomes. Furthermore, even if these conditions are satisfied, there are often deep disparities amongst these outcomes which suggests a stricter standard of market justice is required.

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<sup>27</sup> Gereffi, "The Organization of Buyer-Driven Global Commodity Chains." 1994.

## **Chapter Two:**

In Chapter One, I presented a broad view of the philosophies supporting industrial agriculture and those condemning it. Having provided a comprehensive background of the relevant conclusions, I would now like to carefully outline the major arguments on both sides of the debate in terms of their logical steps, allowing me to point out their major flaws and merits. It is only with this analysis that we can begin to formulate a proposed set of arrangements for the agricultural market in the following chapter.

### **Competitive Markets:**

Foremost, market fundamentalists argue that competitive markets engender the most just economic and social arrangements for agricultural markets. Before we assess the justice of these arrangements, it is crucial to first understand why market fundamentalists make this claim and if agricultural markets are indeed competitive markets. Competitive markets are essentially markets where a large pool of sellers compete to sell highly similar goods to a large pool of buyers. The other two measures of market competitiveness are ease of entry and exit as well as the availability of relevant product information. Possessing these qualities, competitive markets are believed to become regulated by the market-dictated price. The market price is the price at which the quantity of a product supplied by producers is equal to the quantity demanded by consumers. Agricultural markets are often cited as the perfect example of competitive markets because of their huge pools of buyers and sellers as well as the fact that mass-produced food usually takes on a standardized character. For instance, the United States Department of Agriculture reported that in 2015 corn farmers received an average price of \$6 a bushel. If the US were a competitive market, any corn farmer trying to sell a bushel for \$7 would be unlikely to find any buyers, regardless of how

special she claims her corn is.<sup>28</sup> When many companies compete to sell similar products, they are incentivized to create the product at the lowest cost as well as the highest quantity and quality. Therefore, market fundamentalists insist that competitive markets can not only produce great material outcomes but also prevent any single market player from exercising excessive power over a market.

The foundational assumption of a market economy is that individuals will always “behave in such a way as to achieve maximum money gains”.<sup>29</sup> This assumption is said to lead both parties of a transaction to seek a mutually beneficial price.<sup>30</sup> Furthermore, this is the assumption that drives most market fundamentalists to believe that the market is the key to feeding the world. Under this logic, producers will benefit if they can make a greater profit. Consumers will benefit if food can be offered at a lower price. This low price, high quantity scenario is said to satisfy both the economic market demands of producers and consumers, arriving at the most efficient arrangements. Efficiency means that how much of a good or service is produced and how it is distributed depends on the market price. The pressure of competing firms forces each of them to accept the prevailing equilibrium price in the market. The equilibrium price is the optimal condition for producers and consumers because they are collectively able to extract the most benefit from the employment of the limited resources they possess. Market fundamentalists point to industrial agriculture as the means of reaching the market equilibrium where supply equals demand for agricultural products. Industrial agriculture cuts costs for farmers and provides consumers with cheap and plentiful food.

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<sup>28</sup> “Perfect Competition and Why It Matters.” *Khan Academy*, Khan Academy

<sup>29</sup> Polanyi, Karl. “Chapter Six: The Self-Regulating Market and the Fictitious Commodities: Labor, Land, and Money.” *The Great Transformation: The Political and Economic Origins of Our Time*. Beacon Press, 2007, Page 71.

<sup>30</sup> Polanyi, Karl. Pages 71–80.

Agricultural markets mimic some of the proposed effects of competitive markets such as offering low price, high quantity food. However, this does not mean that it is a competitive market. Instead, I will argue that its uncompetitive nature has produced these effects, accompanying a plethora of much more negative ones. In the following paragraphs, I will show how informational asymmetry as well as the market's tendency to monopolize, both reinforced by industrialization, have rendered agricultural markets uncompetitive. Subsequently, I will show how the agricultural market's uncompetitive nature jeopardizes the market fundamentalist's claim that competitive markets produce the most just economic and social arrangements by scrutinizing their standards of justice.

### **The Unrealized Ethical Demands of Consumers:**

One marked change engendered by industrial agriculture is the vast separation between consumers and the production of their food. Food is mankind's closest connection to nature. Yet today, food has shifted to represent a connection between humans, not its natural connection between humankind and the earth. While the proliferation of complex global supply chains for agricultural products has gravely magnified this separation, culture has preached this conceptualization for millennia. The New Testament championed this characterization of food by encouraging a shift in focus from earthly matters towards ones centered around faith and spirituality. Hippocrates once said food is prepared to take it out of its natural form. Furthermore, the modern aesthetic of gastronomy presents eating as a process of pleasure, not a process of necessity.<sup>31</sup>

Beyond these cultural changes, the spread of capitalism and rapid globalization have removed food from the context of its production history and into one's grocery cart as a piece of

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<sup>31</sup> Long, Michael A. "Christian Coff: The Taste for Ethics: An Ethic of Food Consumption." Pages 3-6.

“dead life”<sup>32</sup> which can make no moral claims. In a market system, the major ethical valuation of food a consumer has access to is its *price*. Thus, producers have had to prioritize this “ethical consideration” at the cost of animal and employee well-being, the protection of the environment, the competitive quality of the industry, and food quality and health. There have been attempts to regulate ethical demands such as a recent emphasis on and transparency about eating organic, ethically-sourced, and local products. Yet, most shoppers do not even know what things like organic means. A survey conducted by the brand consulting agency, BFG, showed that less than 20% of shoppers thought they could define organic.<sup>33</sup> Moreover, there seems to be a notable distinction between consumer attitudes and behavior. In a large Nordic study, 48% of grocery customers claimed to prefer buying organic food regardless of the price. Yet, at present, only 5 to 6 % of the total food consumption in Denmark was organic.<sup>34</sup> It is highly unlikely that such a dramatic divergence between consumer action and attitudes would result from dishonest responses. Instead, it suggests that consumers face some kind of barrier to converting their ethics into action. Despite the barriers consumers face to obtaining information about their food’s production history, it is clear that consumers have begun to increasingly view the nutritional quality of their food as within their interest. In the USA the total sales of gluten-free and other “free-from” products are on course to earn \$23.9 billion during 2020, a large increase from previous years.<sup>35</sup> While this is a step towards greater transparency, the production history and factors like environmental degradation, labor conditions, and animal treatment - which appear to affect consumers less directly - have yet to be fully realized as within the interest of consumers.

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<sup>32</sup> Long, Michael A. “Christian Coff: The Taste for Ethics: An Ethic of Food Consumption.” Page 12.

<sup>33</sup> Brownstone, Sydney. “Americans Will Pay More For Organic, But They Also Have No Idea What ‘Organic’ Means.” *Fast Company*, Fast Company, 26 Nov. 2014.

<sup>34</sup> Long, Michael A. “Christian Coff: The Taste for Ethics: An Ethic of Food Consumption.” Page 4.

<sup>35</sup> Bellanger, Caroline. “Influencer Marketing and the Rise of Healthy Eating Habits.” *Upfluence*, 6 July 2020.

In a market economy, it is also not in the producers' interest to shift action for an *unrealized* demand of consumers, especially if it increases costs. By unrealized, I mean a demand that is unable to be known or signaled to producers due to some form of weak agency. In this case, consumers possess inadequate information about their food's production history to attribute any moral significance to it. I will explore ways we might account for ethical demands within the agricultural market in the following chapter. However, for now I just wish to convey that consumers, ignorant about how food products are produced and the effects of that production, are lacking an ethical valuation of food that might alter their demand patterns. Lack of production transparency in the agriculture industry hinders consumers' ability to choose products that align with both their economic and moral interests. Instead, this uncompetitive characteristic of the agricultural market favors large, industrialized factory farms that can offer the lowest prices but fail to meet consumers' ethical standards of production. Spreading information that would allow the ethical demands of consumers to be realized would alter agricultural markets' production and distribution. Maybe price *is* the main factor grocery shoppers consider when choosing what to purchase. However, changes in the discourse surrounding ethically-sourced food as well the compounding and urgent threats industrialized agriculture presents to consumers and farm systems alike suggest that there are ethical considerations that are within the consumer's interest. The true market equilibrium is one where consumers are aware of the water they are polluting, the animals they are mistreating, the chemicals they are eating, and the people they are exploiting.

### **Monopolistic Tendencies:**

Industrial agriculture, with its long and complex supply chains, produces the problem of asymmetric information between producers and consumers. This asymmetry of information, specifically a lack of transparency regarding production practices, jeopardizes the competitive

nature of the agricultural market by preventing consumers from understanding which products are truly within their interests. Informational asymmetry is not the only thing threatening the power balance and competitive nature of the agricultural market. With the rise of industrial and contract agriculture, participants in the agricultural market have been forced to follow the advice given by US Agriculture Secretary Earl Butz in 1976 of “get big or get out.”<sup>36</sup> Butz’s edict would prove to be prophetic, as today’s agriculture market is characterized by a few very large firms that have vastly asymmetrical control over the market. To understand the gravity of this situation, it is crucial to track how this market consolidation occurred.

The industrialization of the agriculture industry brought about many changes to its structure. As I’ve discussed before, the key to industrial agriculture is using technological and mechanical innovations to support high-yield, low-cost agriculture. Yet, these technological and mechanical innovations are extremely expensive and require large sums of fixed costs to enter the market. Therefore, large farms that can industrialize have been allowed to dominate the globalized market for agricultural products.

Moreover, industrial agriculture has incentivized a shift to contract agriculture which further harms the competitive quality of the industry. Contract agriculture is when buyers, typically large agricultural processors or vendors, enter into exclusive contracts with farms to produce what these buyers want. Under these contracts, buyers are also given vast control over *how* the products are produced. From 1969 to 2003, the percentage of US agricultural products produced under contract rose from 11% to 39%.<sup>37</sup> This marks a departure from traditional spot markets which are “made up of numerous competing buyers and sellers who enter into commodity sales transactions “on the spot” with no rights to the oversight of production or

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<sup>36</sup> Powers, Madison. “Food, Fairness, and Global Markets.”. Page 16.

<sup>37</sup> MacDonald and Korb, “Agricultural Contracting Update: Contracts in 2008.” U.S. Dept. of Agriculture, Econ. Res. Serv. February 2011.

expectation for interaction beyond each discrete transaction”.<sup>38</sup> Contract agriculture instead incentivizes buyers, who are now mostly huge global grocery chains and fast-food chains, to favor huge farms that can support their bulk orders of standardized products with stable prices. In 2012, more than half of the money that Americans spent on groceries went to the four largest retailers: Walmart, Kroger, Target, and Safeway.<sup>39</sup> These retailers buy from large farms and food companies that have the capacity to produce large quantities at low prices. Any small farms or food companies that do survive often end up being bought by their larger competitors. Ultimately, contract agriculture has caused a declining pool of growing buyers to have the power to exclude small farms from the market and largely dictate how production transpires.

The standard worry an economist would have from market concentration of power is rising prices. Thankfully, this thesis is not written by one because this is not what we have seen. Instead, food has consistently become cheaper for consumers.<sup>40</sup> Large agro-companies have maintained low prices by compromising food quality and safety. Yet, most notably, they have used their vast market power to unfairly distribute risks and rewards within food supply chains. Contract agriculture allows large-scale retailers to utilize production facilities when they want and how they want, taking the majority of profit for themselves. Additionally, they avoid the risks that come with ownership of the means of production, the financial commitment to a network of permanent employment arrangements, depreciating production facilities, and nature’s uncertainty. Furthermore, the market power these oligopsonies have obtained has enabled buyers to dictate prices to farmers, driving down the economic return for commodities, sometimes below the costs of production. This is a major reason for tax-funded farm subsidies. Essentially, we pay so that

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<sup>38</sup> Powers, Madison. “Food, Fairness, and Global Markets.”. Page 15.

<sup>39</sup> Food and Water Watch. *Grocery Goliaths: How Food Monopolies Impact Consumers*, Food and Water Watch, December, 2013. Page 2.

<sup>40</sup> Long, Michael A. “Christian Coff: The Taste for Ethics: An Ethic of Food Consumption.”

flourishing multinational food processors and retailers do not completely bankrupt farmers.<sup>41</sup>

Farmers occupy by far the least profitable and most risky level of the supply chain and thus are incentivized to consent to the demands of powerful buyers. I will discuss this in more detail later, yet it is important to note that advantaged buyers are often located in industrialized and developed countries whereas developing countries grow crops for them.

Overall, the monopolizing consequences of industrialization are not limited to the agriculture market. Yet, the overwhelming number of individuals participating in this market and the numerous negative externalities associated with its activities render the uncompetitive quality of the agriculture market extremely precarious. Ultimately, the market fundamentalist's argument supporting industrial agriculture rests on the market's competitive quality, a quality that is gravely threatened by the asymmetric information and market power that I have explored above.

### **Adam Smith and Self-Interest:**

Market fundamentalists support competitive markets because they allow the interests of consumers to shape *what* goods are produced, *how* they are produced, and *how much* is produced. Yet, the actual interests that market fundamentalists consider are rather limited. The idea that both consumers and producers will behave in a way to achieve maximal money gains is a capitalist creed that is a driving maxim of contemporary industry. It is an assumption that is foremost supported by Adam Smith's invisible hand metaphor. Smith is revered as the father of neoliberal or market-oriented economics. The invisible hand is his renowned metaphor for the unseen market forces that lead to society's benefit when everyone acts in their self-interest in a competitive and free-market economy. Market fundamentalists have taken Smith's conception of the invisible hand to insist that acting in accordance with one's economic self-interest produces

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<sup>41</sup> Food and Water Watch. *Grocery Goliaths: How Food Monopolies Impact Consumers*, Page 5-9

the most just outcomes for society.<sup>42</sup> Smith, along with myself, would disagree with this characterization of the invisible hand. Self-interest, narrowly conceived as profit-seeking, is unrepresentative of the broad range of interests that Smith counts as “bettering [one’s] condition”.<sup>43</sup> Notably, Smith views self-interest as also including regard for others which he refers to as moral sentiments.

A market-driven by moral sentiments, along with economic self-interest, produces not only efficient but also just outcomes. For Smith, justice is a very important aspect of markets. He states that justice “is the main pillar that upholds the whole edifice. If it is removed, ... the immense fabric of human society ... must in a moment crumble into atoms”.<sup>44</sup> The market fundamentalist’s myopic definition of self-interest leads a profit-driven agricultural market to misrepresent the interests of both producers and consumers. Competitive markets are said to provide an equal playing field for all parties to pursue their interest. However, as we have seen, asymmetry of market power and information allows some participants of the market to extract great benefits while the rest are left in exploitative positions. Ultimately, the market fundamentalists’ foundational claim that pursuing individual economic self-interest produces the most just outcomes for society misrepresents the goals of just markets and dangerously misinterprets Smith’s concept of self-interest. It rests on the assumption that competitive markets produce these effects. Despite the uncompetitive nature of the agricultural market, it is crucial to assess the justice of the arrangements engendered by the market as well as the critiques offered by opponents of industrial agriculture.

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<sup>42</sup> Powers, Madison. “Food, Fairness, and Global Markets.” Page 4

<sup>43</sup> Smith, Adam. *The Wealth of Nations*. Seven Treasures Publications, 2009. Page 341

<sup>44</sup> Smith, Adam. “Of the Sense of Justice, of Remorse, and of the Consciousness of Merit.” *The Theory of Moral Sentiments*. Verlag Wirtschaft Und Finanzen, 1986. Page 84.

Market fundamentalists claim competitive agricultural markets are just because they meet both of their conditions of mutually and socially beneficial outcomes. I have presented arguments supporting the uncompetitive nature of these markets. However, their conclusion labeling the agricultural market as just could still stand independently if the arrangements produced by this not so competitive market still meet a solid standard of justice. Market fundamentalists claim the arrangements reached through the market are mutually beneficial because farmers and consumers both benefit from efficient production. Market fundamentalists claim they are socially beneficial because cheap food benefits all segments of society. They add that industrial agriculture requires fewer farmers and less consumer income aimed towards food production. Thus, the surplus labor force and extra income can be directed at other socially beneficial activities.<sup>45</sup> I will now assess the market fundamentalist's conception of mutually and socially beneficial outcomes in light of various non-competitive and unfair aspects of the market.

### **Rethinking Justice in The Market:**

Critics of industrial agriculture frequently highlight the dangers of an agricultural market solely driven by economic self-interest. Surprisingly, however, they agree with market fundamentalists about a major goal of agricultural markets. Foremost, they are both seeking the most just and efficient arrangements for agricultural markets. They just possess different standards of justice and support very different means of arriving at this state. Critics of industrial agriculture criticize market fundamentalists as having a far too permissive standard of what truly comprises a just market. Surely, they argue, justice cannot be achieved by a system that promotes harmful effects for the environment and society. Instead, these critics of industrial agriculture propose a standard of justice that “seek[s] to accommodate the economic and productive aspects

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<sup>45</sup> Powers, Madison. “Food, Fairness, and Global Markets.” Page 13

of agricultural activities with their effects on the environment and society”.<sup>46</sup> Essentially, these critics reject the notion that the vague idea of mutually and socially beneficial outcomes would even comprise a set of just arrangements. They claim justice demands that we pursue interests other than profit. Among these interests, two of the most important interests neglected by market fundamentalist’s conception of justice are temporal justice and social justice.

As a means of achieving temporal justice for agricultural markets, critics of industrial agriculture advocate for sustainable agriculture. Sustainability refers to meeting “the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>47</sup> Their argument stems from a deep-seated criticism of the temporal nature of industrial agriculture. Industrial agriculture, they say, incentivizes producers to consider short-term profits while encouraging them to take long-term risks. The industrialist pursues short-term profits with the hope that future innovations will solve the long-term risks they decide to take on. In other cases, they pursue short-term profits with the hope that the long-term risks *they impose* will be distributed amongst a larger population. For example, intensive farming in the last century has led to soil degradation in many parts of the globe. It is estimated that without the invention of the Haber-Bosch process of synthesizing ammonia to make chemical fertilizer, 40% of the world’s population would have starved from food shortages. Yet, these same chemical fertilizers have been known to contaminate nearby water sources, contribute to the greenhouse effect, and increase topsoil acidity.<sup>48</sup> Furthermore, these long-term risks threaten the competitive nature of the industry because only large firms can afford expensive and innovative technologies or relocate production after they have caused ecological or communal devastation. With all this in mind,

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<sup>46</sup> James, Harvey S. “Sustainable Agriculture and Free Market Economics: Finding Common Ground in Adam Smith.” Page 429.

<sup>47</sup> James, Harvey S. “Sustainable Agriculture and Free Market Economics: Finding Common Ground in Adam Smith.” Page 427.

<sup>48</sup> Borlaug, Norman E., and Christopher R. Dowsell. “Feeding A World of 10 Billion People: Our 21st Century Challenge.” Pages 5-8.

critics of industrial agriculture insist that a stricter conception of justice should be applied to agricultural markets in order to avoid the impending social and ecological consequences of a solely market-driven industry.

In addition to the future risks industrial agriculture poses, industrial agriculture also poses devastating consequences to present-day social and environmental conditions. “Food processors tend to locate regional hubs or clusters of contractual relationships in areas where there are weak unions, a surplus of flexible labor, low prevailing wages, and weak labor and environmental laws”.<sup>49</sup> The concentration of production in vulnerable communities threatens their labor conditions and their environment. Oftentimes, large companies concentrate production in an area until lands are overfarmed, regulation is tightened, or some other hindrance to profitability presents itself. These large corporations, usually only confined by short-term contracts, can thus move production, leaving behind the environmental and social destruction they caused. Recall that market fundamentalists claim that the agricultural market is just because it has socially beneficial outcomes. To them, the most widespread social benefit is access to sufficient food. Obviously, this is a benefit of tantamount importance. However, the market fundamentalist’s conception of justice fails to consider the presence of widespread social disservices. Would a world that is well-fed, yet accelerating towards their collective doom be just?

In sum, both market fundamentalists and critics of industrial agriculture want to create the most just and efficient circumstances for global agriculture. Yet, they disagree about the standards of justice and the ideal means to reach them. The ethical component of markets is undeniably important. The justice of any system is what holds it together, creating a sense of legitimacy in the eyes of the public as well as securing their rights. The proposed standards of justice for agricultural markets vary. However, the role of justice in any market is to promote the fair and

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<sup>49</sup> Powers, Madison. “Food, Fairness, and Global Markets.”. Page 16.

equitable distribution of goods and social arrangements as well as to minimize harm, especially to the most disadvantaged groups. While questions about the justice and ethics of food production are very important, someone who is starving would undoubtedly favor a cheap meal than an ethical but expensive one. This observation brings up the dramatic inequality between the agriculture of developed and developing countries as well as their respective needs. The global character of our agricultural market demands that our characterization of justice takes these differing needs into account. In other words, we must seek a conception of global justice for the agricultural market. In the following paragraphs, I will thus be presenting the market fundamentalists' two main strategies for achieving global justice for the agricultural market.

### **Comparative Advantage:**

Even the most ardent advocate for free agricultural markets cannot ignore the grave inequities between the agricultural capabilities of the developed and developing world. In my first chapter, I listed many of these imbalances. In this chapter, I plan to explain two proposals market fundamentalists have presented that are aimed at closing the gap between agriculture in developed and developing nations. One of the most common solutions to closing this gap, especially popular amongst international trade organizations, is integrating developing countries into global agricultural markets. This solution is based on the idea of comparative advantage. In summary of my explanation in Chapter One, comparative advantage states that nations should specialize in the production of goods which they can produce effectively and at a lower cost than other nations. Market fundamentalists claim a system based on comparative advantage is both mutually advantageous and socially beneficial, therefore fulfilling their standard of justice.<sup>50</sup> While it may be mutually beneficial, the fact that the benefits are extremely unequal and the numerous negative

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<sup>50</sup> Pinstrup-Anderson and Watson, *Food Policy for Developing Countries*. Pages 178–179.

externalities it promotes makes any agricultural system fueled by the logic of comparative advantage an unjust one.

Foremost, the adoption of industrial agriculture has created an unjust dynamic between the advantages of developed and developing countries. The justice of comparative advantage relies primarily on the fact that trade between developed and developing countries will be mutually advantageous. However, mutuality is an extremely permissive standard of justice. Developed and developing countries possess very different advantages when it comes to agricultural production. Therefore, they receive very unequal benefits from these advantages. Developing nations possess a surplus of agricultural labor, economically unproductive land, and a plentiful supply of sunshine and water.<sup>51</sup> This positions them as advantaged providers of raw agricultural inputs within global markets. Developed nations possess vast advantages in agricultural transportation, processing, and disposable incomes relative to developing countries. Thus, they are advantaged in the later steps in the agriculture supply chain which are preparing the raw inputs for sale and the actual selling of these products. While developing countries can tap into more lucrative foreign markets through comparative advantage, the benefits developed countries receive from participating in this trade are far greater. The overwhelmingly profitable positions of global supply chains are towards the end where products are processed, packaged, and sold. In light of these inequalities, it is clear that comparative advantage disproportionately benefits developed countries.<sup>52</sup> If mutuality is to be a signifier of justice, there ought to be some kind of measurement of fairness and equality of the mutual benefits received.

Moreover, developing countries face numerous negative externalities from their position within a global supply chain organized by the theory of comparative advantage. Industrial

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<sup>51</sup> Powers, Madison. "Food, Fairness, and Global Markets." Page 12.

<sup>52</sup> Powers, Madison. "Food, Fairness, and Global Markets." Page 12-15.

agriculture is driven by innovations in production practices. These innovations rely on the financial and technological capacity that is far more available in developed countries.<sup>53</sup> Because developing countries must focus on farming combined with the fact that they lack capacities conducive to industrialization, developing countries “that concentrate on supplying raw commodities to developed nations tend to deindustrialize”.<sup>54</sup> Furthermore, market forces dictate that these countries still must produce products profitably. While industrial agriculture and industrial means of food processing help lower costs in developed countries, developing countries must cut costs in other ways. This often means that landowners in developing countries exploit their labor through insanely low wages and even slavery. Most of the wealth captured from comparative advantage is distributed to the preexisting elites and landowners in developing countries.<sup>55</sup> International trade has disastrous effects on the economic distribution of developing countries. In fact, “For every dollar of increase in a developing country’s GDP that is achieved through increased international trade, roughly \$50 of income is transferred from the lowest economic strata to the middle and upper-income strata”.<sup>56</sup> This undermines the market fundamentalist’s support for comparative advantage based on widely dispersed social benefits. Global trade, instead, encourages the unequal and unjust distribution of wealth in these countries. Lastly, a pressure to be profitable incentivizes elites to cut costs through relaxed regulation, threatening the environmental and public health of these countries. Even elites in developing countries are harmed by this as it hinders their long-term productive capabilities. While global agricultural trade based on comparative advantage may lead to more efficient outcomes, it greatly magnifies injustices between developed and developing countries. This system injures the most

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<sup>53</sup> Devarajan and Rodrik, “Trade Liberalization in Developing Countries: Do Imperfect Competition and Scale Economies Matter?,” *American Economic Review*, American Economic Association. May. Pages 283–287.

<sup>54</sup> Powers, Madison. “Food, Fairness, and Global Markets.” Page 13.

<sup>55</sup> Rodrik, *The Globalization Paradox*, 55-61.

<sup>56</sup> Powers, Madison. “Food, Fairness, and Global Markets.” Page 13.

disadvantaged members of society. According to many interpretations of justice, notably John Rawl's difference principle, any inequality is unjust if it doesn't benefit the poorest members of society.<sup>57</sup> I will explore Rawl's difference principle in more depth in the following chapter.

### **Innovation as Justice:**

A global agriculture market surely promotes inequalities between developed and developing countries that jeopardizes the justice of the entire system. Norman Borlaug, likely the most respected expert on global food security, argues that the most effective way to narrow the gap between developed and developing countries is to provide developing countries with technological and methodological innovations to increase their agricultural productivity. This increased productivity, his argument goes, would foremost allow these countries to feed their population and also become more competitive within the global market. He points to his successful experience decreasing hunger by providing high-yield grain variations to Mexico, India, and Pakistan. Providing developing countries with industrial techniques increases their agency as market players. More agency means that benefits may be distributed more fairly throughout the globe.

Ultimately, Borlaug's policies would likely ameliorate world hunger and narrow the gap of received benefits between developed and developing countries participating in global agricultural markets. His solution would create a more fair world, but there is more to justice than just fairness. Any system that intensifies industrial agriculture would also intensify all of the negative externalities of industrial agriculture that I have repeatedly warned of throughout this thesis. Moreover, these negative externalities would be applied on a global scale. In a system ruled by comparative advantage where developed and developing countries have different industrial capabilities, the negative externalities of developed and developing countries are

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<sup>57</sup> Rawls, John. *A Theory of Justice*. Universal Law Publishing Co Ltd, 2013. Page 47.

different. For example, developed countries contribute to global warming far less than developing countries. Industrializing developing countries would compound the effects of collective action problems resulting from industrialization. Even Rawls, in his book titled *A Theory of Justice*, understands that “certain things are irrelevant from the standpoint of justice”.<sup>58</sup> One of these things is time. Justice today cannot be justified at the expense of justice tomorrow. Therefore, in the following chapter, I plan to propose a set of agricultural arrangements that not only meets justice’s condition of fairness but also of sustainability.

### **Varied Agriculture, Varied Solutions:**

Agriculture is not monolithic. As we have seen, different systems present different problems. In western countries, more people die from being too fat than from not getting enough to eat.<sup>59</sup> Opposingly, almost all food-insecure individuals are in developing countries, making up 27% of their collective population.<sup>60</sup> If we wish to provide the most just and efficient outcomes, a one-size-fits-all solution is not going to work. We must use different means to achieve a just state that recognizes the global connectedness of agriculture and humankind’s shared connection to the earth. Like any market good, we must understand agriculture as a commodity but not forget its other qualities and effects. In the next chapter, I will be presenting my own argument for how we should think about the future of food and how we can effectively produce the most efficient and just agriculture markets throughout the globe.

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<sup>58</sup> Rawls, John. *A Theory of Justice*. Page 17

<sup>59</sup> Long, Michael A. “Christian Coff: The Taste for Ethics: An Ethic of Food Consumption.” Page 21.

<sup>60</sup> Borlaug, Norman E., and Christopher R. Dowsell. “Feeding A World of 10 Billion People: Our 21st Century Challenge.” Page 15

## **Chapter 3:**

### **Goals of Chapter 3:**

As I shift to the final chapter of my thesis, I wish foremost to present a set of arrangements for the global agricultural market that is both just and efficient. If we wish to arrive at a just and efficient agricultural market, I must reach a few notable conclusions. I plan on presenting the main pillars of justice we must focus on to correct the injustices of the agricultural market. The two primary types of justice I will be focusing on are temporal and social justice. To be temporally just, a market must respect the interests of both current and future players. The agricultural market, in prioritizing short-term profits over long-term risks, has placed future market players in a precarious situation. To be socially just, a market must actively seek to correct any large variations in power or agency and prevent the formation or continuation of exploitative relationships. Large and powerful agriculture companies, in search of greater profits, are motivated to exploit vulnerable populations. While the market fundamentalist's standard of justice permits these practices as long as benefits received are mutual and socially wide-spread, I view any practice that places profit over human life or dignity as inherently unjust.

Before outlining my proposed adjustments to the agricultural market, it is crucial to decide who should bear the burden of implementing these changes. To arrive at this answer, there are two main relevant conclusions we must reach. First, we must identify who is morally responsible for implementing these changes. Agricultural markets contain many players. Consumers, producers, and governments all influence the arrangements of agricultural markets. Therefore, we must identify who is morally responsible for upholding the justice and efficiency of the market. Secondly, we must evaluate the pragmatically relevant facts in addition to moral arguments. To arrive at our desired set of arrangements, we must consider which players can affect the most

positive change. Now, before I can present my proposals for upholding the justice of the agricultural market, I seek to identify who is morally responsible for implementing these changes.

### **Moral Responsibility:**

In a free-market, all players influence the arrangements produced. As I explored in previous chapters, this is a central appeal of a free-market system. Consumers signal their demand based on the products they buy. Producers similarly may supply what and how much it is in their interest to supply. This mutual feedback determines the efficiency of a competitive market, allowing the demands of both consumers and producers to be reflected in the mutually beneficial market price. Yet, it is not just producers and consumers that influence market arrangements. The government must have a central role in any market economy. In *Why Some Things Should Not Be For Sale*, Deborah Satz argues that the social embeddedness of markets is a crucial aspect of any market economy. Social embeddedness means that “all markets [must] depend for their operation on background property rules and a complex of social, cultural, and legal institutions”.<sup>61</sup> For individuals to be willing to participate in transactions, they depend on the state to enforce health regulations, curtail monopolies, and punish those who violate contracts. A successful free-market economy is only possible when the structures and rules that protect negative liberty are maintained by the government. Negative liberty is the freedom from unjust interference by others.

Government regulation is simply the government's way of ensuring that one's positive liberty, “the freedom to be in control of one's own life”<sup>62</sup>, does not severely infringe upon the negative liberties of others. The government sets limits on the positive liberties of some to provide critical liberties to others. Participants in agricultural markets have extremely vulnerable and important negative liberties to protect. I have shown how an agriculture market driven solely

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<sup>61</sup> Satz, Debra. *Why Some Things Should Not Be For Sale: The Moral Limits of Markets*. Oxford University Press, 2012. Page 16.

<sup>62</sup> Satz, Debra. *Why Some Things Should Not Be For Sale: The Moral Limits of Markets*. Page 24.

by market forces engenders extreme environmental damage, communal devastation, and even mass starvation. Thus, in regulating the agriculture industry, protecting crucial negative liberties is an extremely relevant and salient goal. For instance, setting food health and safety standards for companies to follow is a minor infringement of liberties to ensure that others can access critical negative liberties such as safety from foodborne illness and death. Very few individuals would object to the moral position of the FDA in regulating food safety. Government regulation - encouraging competition, solidifying property rights, and various other market adjustments - is necessary to protect negative liberties. A society where individuals are free to exchange the fruits of their labor but are prey to the violent desires of others is far from a free society. Each government has a duty to protect its citizens, most notably in the form of protecting their lives and the quality of those lives. Therefore, each government has a moral imperative to regulate agricultural markets to best protect its citizenry and promote the most just and efficient arrangements. Each government has the moral obligation to take on the burden of crafting and implementing solutions to prevent the negative effects of unrestrained agricultural markets. Yet, this is not a universally agreed-upon principle. Some scholars have argued that any form of government regulation should be avoided if there are means to achieve the same result without restricting liberties.

Peter Singer, a leader in the movement calling for more ethical agricultural processes and consumption, believes that “the signature ethical problem of the global consumer society is our *responsibility* for the unethical practices that lie behind the products we buy”.<sup>63</sup> Therefore, he proposes that consumers must adapt their consumption practices in order to promote a more just and ethical set of arrangements for the agricultural market. Singer does not necessarily believe that the government is not morally responsible for instigating a just and ethical set of agricultural

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<sup>63</sup> Singer, Peter. “Utilitarianism and Vegetarianism,” *Philosophy & Public Affairs*. 1980. Page 45

arrangements. For instance, any government's elimination of factory farming would have tremendous benefits. Singer contends that it would "save billions of animals from intense suffering each year, improve public health, reduce food prices in lesser developed countries, reduce energy costs by reducing the price of biofuels, reduce air and water pollution, reduce the irrational consumption of scarce groundwater resources, reduce greenhouse gas emissions, reduce health-care costs and thereby reduce the national deficit, and allow family farmers to compete more effectively against agribusiness conglomerates".<sup>64</sup> However, few governments have enacted any notable restrictions on factory farming or other harmful agricultural practices. Singer argues that the moral responsibility for altering unethical production practices is shared by governments and consumers. When governments fail to act, the burden of this moral imperative is thus transferred to consumers. While I agree with the application of Singer's argument in most markets, the agriculture market is unique in two notable ways that make impactful consumer action very challenging.

Foremost, Singer's argument for consumer responsibility rests on one major assumption. Singer believes that "the expected effect of one individual's consumption on production is roughly equal to the average effect on production of everyone's actions of that type".<sup>65</sup> In simpler terms, if I were to give up red meat, eating four fewer cows this year, Singer would expect there to be roughly four fewer cows slaughtered for red meat production. He assumes a completely efficient market, where production decisions are simply a mirror of individual consumer choices. I have previously shown that consumers often lack information about the production history of the agricultural products that they purchase. This weakens Singer's argument for consumer

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<sup>64</sup> Budolfson, Mark Bryant. "The Inefficacy Objection to Utilitarian Theories of the Ethics of the Marketplace" *Consumer Ethics*, Dec. 2018, Page 205.

<sup>65</sup> Budolfson, Mark Bryant. "The Inefficacy Objection to Utilitarian Theories of the Ethics of the Marketplace" Page 204.

responsibility by showing that consumers are often unable to make informed moral decisions. Yet, consumers are not the only market players lacking information. Producers of agricultural products lack information about individual consumer decisions because of the large and complex supply chains that dominate the agricultural industry. For producers to alter their quantity produced or means of production, there exists a large threshold of shifting individual consumer choices. Furthermore, each link of these large and complex supply chains are designed with a reliable amount of slack (overestimation) to absorb any variable effects from the links before it. This slack, compounded by the many links in the chain and large thresholds needed to change production quantity, make production decisions extremely insensitive to individual consumer decisions. This nuanced understanding of the link between production and consumption decisions ultimately discredits Singer's approach to consumer ethics by showing that individual changes in consumption consistently have almost no expected effect on production in agricultural markets.<sup>66</sup>

This argument against Peter Singer's utilitarian method of solving consumer ethics problems through consumer action reveals the unique situation of the food economy. Vast supply chains and emphasis on economies of scale render individual consumer decisions essentially futile in agricultural markets. This, combined with consumers' lack of important information about production history, shows that consumers of agricultural products have very little agency to turn their ethical beliefs into effective action. Thus, consumers must either be given much greater agency or alternative methods such as governmental regulation should work to shift production in line with consumer ethics and moral responsibilities. The moral responsibility to regulate harmful agricultural practices, both in theory and in practice, thus falls on the government. Before I get into various ways the government can produce a more just and efficient arrangement for the agricultural market, I want to return to my point about the differences between developing and

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<sup>66</sup> Budolfson, Mark Bryant. Pages 205-210.

developed nations' agriculture. The global character of the agricultural market poses challenges to reaching an equally just state in nations that have dramatically unequal agricultural practices and benefits.

### **The Development Dilemma:**

In Chapter 2, I explored the vastly different agricultural markets of the developed and developing world. The adoption of industrial agriculture, majorly in developed countries, has created an unjust dynamic between the advantages of developed and developing countries. Developing countries occupy the least profitable steps of the supply chain, whereas developed nations reap most of the benefits from the production process and pass on many of the negative environmental and social effects to their suppliers of raw materials in developing countries. I presented the two main arguments given by market fundamentalists aimed at lessening this gap. I concluded that comparative advantage unfairly favors developed nations and prevents developing nations from ever industrializing. Secondly, I offered how Norman Borlaug's idea of industrializing the developed world would lead to the proliferation of the negative effects of industrial agriculture on a global scale. What I found strange about both of these proposals is that neither questioned the moral status of the industrial agriculture of the developed world. Neither philosophical positions sought to change industrial processes or place any burdens on the developed world. What they fail to correct is the exploitative character of the global agriculture trade. Developed nations rely on developing nations to provide them with cheap raw materials. Developed nations rely on developing nations to destroy their land and social organization which disproportionately benefits wealthy landowners in these countries. Developed nations rely on developing nations to remain vulnerable and deindustrialized so that they can feed their countries while millions starve in developing nations. At least half of the world's most food-insecure people

are poor smallholder farmers in low-income countries.<sup>67</sup> Overall, if we truly wish to create a just and efficient global agricultural market, we must focus on serving vulnerable populations that have endured most of industrial agriculture's harm.

I am not the first philosopher to point out the injustice of the vastly unequal distribution of benefits and burdens within markets or political systems. John Rawls, one of the most influential moral philosophers of the twentieth century, sketches out his conception of justice in *Justice As Fairness*. Rawls despises any form of inequality and presents it as counter to justice. However, under his theory of justice, social and economic inequalities may be considered just if they are to meet two conditions. First, they must be attached to positions and offices open to all. Second, they are to be to the greatest benefit of the least advantaged members of society. The second condition is usually referred to as the difference principle. The difference principle, applied to the global agriculture market, would allow inequalities to exist so long as they benefit the least advantaged members of society.<sup>68</sup> In the context of the developed and developing nations divide, this means that inequality in the global agricultural market would only be just if it benefited developing nations.

Therefore, under Rawls' strict egalitarian definition of justice, the inequalities of the global agricultural market should be flipped. The current state of inequality benefits developed nations through industrial agriculture. Instead, developing nations should be allowed to benefit from industrialization, while developed nations should be forced to deindustrialize and lessen their harmful effects. This would allow developing nations to industrialize *sustainably*, while developed nations would have to either deindustrialize or find sustainable ways to lessen their social and environmental impact.

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<sup>67</sup> Borlaug, Norman E., and Christopher R. Dowswell. Page 15.

<sup>68</sup> Rawls, J., & Kelly, E. (2001). *Justice as Fairness: A Restatement*. Cambridge, Mass: Harvard University Press. Pages 57-68.

### **Sustainability As Justice:**

As the difference principle illuminates, any strict standard of justice demands that the benefits and burdens of industrial agriculture should be distributed fairly. The current state of global agricultural markets unfairly advantages developed nations. Market forces only perpetuate this unjust relationship. Organizations like the UN's World Food Program, which was awarded the 2020 Nobel Peace Prize, have directed global attention towards hunger and inequities present in developing countries. Governments, pressured by public opinion, the need to maintain diplomatic relations, and hopefully moral reasoning, have responded to these crises, albeit inadequately. Yet, there remains an extremely vulnerable population that is less visible to the world. They are unable to be printed on UNICEF donation boxes or present their grievances at diplomatic conferences. They are the invisible victims of industrial agriculture. They are our future generations.

Market fundamentalists will contend that economic interests are counter to sustainable interests. I could not disagree more. The problem is that agriculture's economic models value *short-term* profitability, efficiency, and productivity. Agriculture is a very unpredictable industry. Farmers do not know what the next season will bring. Bad weather, natural disaster, or shifting supply or demand could destroy their profitability in the future. Therefore, farmers and agricultural processors attempt to maximize short-term profits to account for any unexpected harm in the future. Yet, this economic logic is troubling. Instead of taking on even greater long-term risks in the hope that some innovation will save them, agricultural players should attempt to create the most sustainable business model they can. Even those who whole-heartedly support industrial agriculture as it is mostly agree that many of industrial agriculture's practices are inconsistent with the long-term economic interests of farmers, other agricultural producers,

and society in general. Any private equity firm would scoff at the idea that it is in one's economic interest to destroy their productive capital today in search of short-term profits. Sustainability is built into capitalism. Many of the world's largest companies, with the exception of modern technology giants, have been around for centuries. They have had to adapt to changing technologies, availability of natural resources, and public morality. A firm's ability to adapt to and predict future needs is a large aspect of what helps them maintain profitability. While I hope I have made it clear that economic interests are not in opposition to sustainable interests, I do not wish to be constrained by economic arguments.

“Continued dependence on nonrenewable resources, excessive soil erosion, depletion of ozone layer, reduction of biological diversity, economic inefficiency, increasing human population, decline of rural communities, and unjust social and economic developments”<sup>69</sup> are all *moral* reasons to be fearful for our future. These practices jeopardize the survival of future generations. Justice is not immune to time. Individuals in the future have the same rights as individuals today. Foremost, they possess the right not to be killed. Industrial agriculture threatens this right of future generations and thus we possess a strong moral duty to restore it.

### **Social Justice As Justice:**

In addition to the future risks industrial agriculture poses, industrial agriculture poses devastating consequences to present-day social conditions. Industrial agriculture, guided by the incentive of greater profits and lower costs, often exploits laborers and unloads many of the negative effects of industrial processes on vulnerable individuals and communities.

Industrialization's exploitative nature is not a recent discovery. Progressive journalists, notably Upton Sinclair in *The Jungle*, exposed the inhumane working conditions in the meat-packing industry and various other industries that had gone through a rapid process of industrialization

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<sup>69</sup> James, Harvey S. Page 428.

during the early 20th century. A century later, these same workers are being exploited. Since April, newspapers have frequently identified and exposed meat-packing plants as unusual hotbeds for COVID-19 infection. Employees at these plants are packed in tight and humid quarters, making viruses more easily spread. These workers are vulnerable in other ways too. Meat-packing and agricultural processing and labor in general is an industry that is known for its low wages, dangerous conditions, and dependence on immigrant labor. Nearly 30% of workers at meat-processing plants are immigrants.<sup>70</sup> Furthermore, as I explored earlier, many large industrial agriculture companies concentrate production in poor, rural areas that come to depend on employment from firms. There are 56 counties in the United States where meatpacking is estimated to account for more than 20 percent of all county employment. Nowhere near this extent of employment dependence is found in any other US manufacturing industry. These counties also were substantially more likely to be classified as having high levels of poverty.<sup>71</sup> COVID did not suddenly cause the exploitation of these “essential” yet poorly treated workers. The exploitative dynamic between labor and large agricultural firms is a foundational aspect of industrial agriculture. It just wasn’t until we *directly* and *essentially* relied on these workers that we realized they were being exploited.

While this relevant example shows the social injustice of the meat-packing industry, the broader industrial agriculture industry is wrought with social injustice as well. Furthermore, the conditions of meat-packers in the US are pleasant compared to many of the agricultural laborers in less developed countries. Ultimately, in order to keep food costs low, corporations are incentivized to exploit vulnerable workers. If companies are unwilling to be compelled by

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<sup>70</sup> Stewart, Anna, and Ivana Kottasová. “Why Meat Processing Plants Have Become Covid-19 Hotbeds.” *CNN*, Cable News Network, 27 June 2020.

<sup>71</sup> “The Meatpacking Industry in Rural America During the COVID-19 Pandemic.” *USDA ERS - The Meatpacking Industry in Rural America During the COVID-19 Pandemic*.

morality, then the government must step in to adjust economic incentives to ones that produce more just arrangements.

## **Conclusion:**

### **Thesis Summary**

In Chapter 1, I introduced readers to the various viewpoints on how to achieve the most just and efficient arrangements for the agricultural market. In Chapter 2, I took these conclusions and carefully outlined the major philosophical arguments used to arrive at them. I focused mainly on the market fundamentalist's position since it advocates for industrialization, the dominant direction of the contemporary agriculture industry. In evaluating the market fundamentalist's primary claim that free and competitive markets produce the most just outcomes for society, I began by assessing if the market was truly competitive. Through my research, I observed vast asymmetry of market power and accessible information present in the agricultural market that render it largely uncompetitive. Furthermore, the economic interests pursued by the market fundamentalists' theories fail to account for citizens' moral interests. These ignored moral interests threaten the justice of the market and produce countless negative externalities. Environmental degradation, social inequality, and labor exploitation are a few examples of the negative effects engendered when crucial moral and collective interests are excluded from the agricultural market. To arrive at a truly fair and equitable standard of justice, I proposed broadening the definition of justice to include temporal and social justice. Finally, I looked at the differences in agricultural markets in developing and developed countries. I introduced two theories market fundamentalists have presented aimed at closing the gap between developed and developing agriculture. The first theory, comparative advantage, leads developing nations to become the suppliers of raw materials to large buyers in the developed world. Not only does this scenario promote an exploitative relationship between the developed and developing world, but it also hinders any prospects of industrialization that might have been achieved in developing

countries. Finally, Norman Borlaug has proposed providing technological and methodological innovations to developing countries to increase their agricultural productivity. This situation would surely ameliorate world hunger and narrow the gap of received benefits between developed and developing countries participating in global agricultural markets. However, it would also intensify many of the negative externalities posed by industrial agriculture.

Therefore, none of the proposed arrangements for the agricultural market I explored have managed to meet a truly comprehensive standard of justice. For the arrangements of the agricultural industry to meet my stricter standards of justice, the critical, but often neglected, standards of intertemporal, social, and distributive justice must be met. An agricultural market that abided by these standards would not only be able to efficiently feed the world but would also justly distribute both the benefits and consequences industrial agriculture generates. Therefore, in Chapter 3 I sought to propose a set of arrangements for the global agricultural market that is both just and efficient. First, I asked the question of who would be morally responsible for implementing the changes necessary to arrive at this state. Appealing to the work of Deborah Satz, I concluded that the government's crucial role of protecting their citizens' negative liberties makes them responsible for correcting the ills of agricultural markets. I refuted Peter Singer's argument that consumers share this role with a nuanced explanation of how inefficient agricultural markets are. Next, I crafted a solution to the inequality of agricultural markets in the developed and developing worlds. This solution brought in John Rawls' difference principle to argue that any market inequalities that exist should benefit developing countries and allow only them to industrialize sustainably. Finally, I proposed expanding the standard of justice we use to shape and scrutinize agricultural markets to include both temporal and social justice.

## **The Future of Industrial Agriculture**

There are those who support industrial agriculture and those who denounce it. Market fundamentalists think of food as measurable and material, only in terms of costs and benefits. They believe that this market logic produces the most mutually and socially beneficial outcomes, rendering the market the just captain of agriculture. Critics of this logic point to the market's failures and their tendency to produce unfair outcomes. Market incentives have placed price and quantity as the "ethical" valuation of the agricultural market. By only prioritizing these market values, we sacrifice the well-being of animals and employees, the protection of the environment and competitive quality of the industry, and their food quality and health.

Both groups feel strongly about their positions and warn of disastrous, even apocalyptic effects if the ideals of the other group are adopted by the agriculture industry or regulative bodies. Possessing such great disagreements, it is difficult to imagine a situation that both parties can accept a certain political arrangement. Thus, it was the purpose of this thesis to evaluate the possibility of reconciling justice with efficiency in agricultural markets. How the food we consume is produced dictates how we live our lives, the justice of our world, and the future of our species and our planet. Therefore, the newly emerging study and implementation of agricultural justice are of paramount importance to every person. The first step we all must take is understanding that deciding what we eat is not an amoral choice. It is instead one of the largest moral questions we consider each day and thus *must* be treated accordingly.

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