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Importance of Fair Food Policies through the Discussion of Ethics, Social Justice and Climate Change

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Abstract

Survivability of human beings depends on the consumption of fats, carbohydrates, minerals, vitamins and water. These components can be attained through the consumption of food, which can be attained from a variety of plants and animals. This attainment of food is thoroughly digested by your body in order to sustain it and provide it with energy for work. Garrett Hardin is an ecologist and philosopher, who warned us about the dangers of overpopulation through his literary work called The Tragedy of the Commons. He specifically outlined the difference in the energy needed for mere maintenance and work capacity for human beings. In this literary work he stated, "for man, maintenance of life requires about 1600 kilocalories a day ('maintenance calories'). Anything that he does over and above merely staying alive will be defined as work, and is supported by 'work calories' which he takes in. Work calories are used not only for what we call work in common speech; they are also required for all forms of enjoyment" (Hardin). Through the Neolithic Revolution, "we abandoned the commons in food gathering, enclosing farm land and restricting pastures and hunting and fishing areas", around 9000BC in the Fertile Crescent (Hardin). The Neolithic Revolution started the cultivation of "founder crops", which consisted of wheat, barley, peas, lentils, chickpeas, and flax. The nomadic hunter-gatherers from 8000 BCE commenced the domestication of animals such as dogs, goats, sheep, cattle and pigs (Brown University). Industrial Revolution led to an explosion in improvement of technology and methods for farming, which provided people with the capability to produce massive amounts of food. Throughout the history of human beings, we as a species have never produced more food, than ever with so little manpower.

Keywords: Climate change; Food policies; Ethics; Child labor

Introduction

With this massive production of food and a constant development in agricultural technologies, our farming population has rapidly decreased in less than one century. According to the United Kingdom's Agricultural Department, "during the 20th century, the ratio of farmers has declined in every part of the world--from 35 to 4.2 percent in developed nations between 1950 and 2010, and from 81 to 48.2 percent in developing countries" (Momagri- UK). Yet, "the world produces 17% more food per person today than it did 30 years ago" (OXFAM). Due to massive food production, globalization and global commerce have compelled countries to create food policies. Iowa Food Policy Council committee is the largest food committee in the United States, who are responsible for creating food policies for the United States Congress. Iowa has an influential food policy committee due to "90% of arable land in Iowa is dedicated to farming for livestock or corn" (Library of Congress). Iowa Food Policy Council has determined that "food policy is the area of public policy concerning how food is produced, processed, distributed, and purchased" (Iowa Food Policy Council). These policies influence the processing of food operations and the agricultural production system as well. Food policy can be promulgated on any level, from local to global, and by a government agency, business, or organization. Food policymakers engage in activities such as regulation of food-related industries, establishing eligibility standards for food assistance programs, ensuring safety of the food supply, food labeling, and even setting the requirements for an organic product. Overall, food policy is a vast topic with different

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levels of concentrations such as the agricultural level, food processing level and to the business or governmental level.

Literature Review

Ethics, Social Justice and Climate Change

As a global society, we should ask several questions regarding our food policies in order to improve our understanding of it such as, what is our relationship to human ethics, animal ethics, social justice and climate change issues with our current food policies? What food policies should we be promoting in order to solve these ethical problems and social justice issues? What food policies do we need in order to reduce the effects of climate change caused by food production, food processing and through food distribution? Finally, what did Dr. Rod MacRae, a guest lecturer at York University advocate for in his lecture?

Social justice is a board subject in regard to food policy because we have designed an extremely complicated system; that allows the maximum amount of food to be produced through the exploitation of human beings. International Program on the Elimination of Child Labor (IPEC) is a specialized agency of the United Nations, which accumulates data for child labor and attempt to eliminate this issue on a global scale through several programs. According to IPEC's 2016 report, it estimates that "worldwide 60 percent of all child laborers' belong to the age group of 5-17. This amounts to over 98 million girls

and boys" (IPEC). Additionally, farmers around the world are being exploited by being underpaid, burden by corporations to make expensive renovations to their farms and through the vicious cycle of buying farming inputs. The concept of farming inputs was properly explained by a food policy analyst and a York University professor, Dr. Rod MacRae. He stated in his guest lecture that farming input "is anything that is bought from another entity to be utilized for the growth and protection of your crops" (Lecture, March.1). Farming inputs can be farming machineries, pesticides, herbicides, fertilizers, GMO seeds and water. He also stated that if the farmers in a country or in a region generate high revenues, than the prices for these farming inputs will inflate. Depending on the overall farmers' profits, the prices of these inputs will fluctuate in positive correlation. This has led several farmers around the world into severe poverty or debts, thus causing them to lose their farms or worse, commit suicide. In 2014, the National Crime Records Bureau of India reported that "5,650 farmers committed suicide" due to extreme debt or poverty. Also, the highest numbers of farmer suicides were recorded in 2004 "when 18,241 farmers committed suicide" (IPS). If these issues are not resolved in the near future, it will become worse as time proceeds because our need for cheap and accessible food will push more farmers indirectly or directly into poverty. If input selling corporations such as Monsanto or food buying corporations are not regulated than they will threaten the farmers into selling their products for cheap, increase the input products' cost or hire child labor in order to offset the cost of ethically paid workers. Margaret Atwood is a Canadian author, who has written several books regarding our 'speculative future' such as Oryx and Crake. Speculative future is type of a fictional novel, that presents futuristic events, technology or conditions, which are likely to become reality as time proceeds. On a global scale, "small growers are out of business and reduced both them and their laborers to starvation level poverty" (At wood 179). This speculative future could become our reality if our food policies do not protect the rights of our farmers from automation; reduce input costs, elimination of child labor, and elimination of exploited labor with increasing the utilization of fair paid laborer's.

Ethics is a philosophical branch of studies that involves systematizing, defending, and recommending concepts of right and wrong conduct. This is the philosophical meaning of ethics, but the practical meaning of ethics was explained by Dr. John Benson. He is an assistant professor of vertebrate ecology in the University of Nebraska and is written a book called Environmental Ethics in 2000. In Environmental Ethics he states, "ethics is concerned with individuals and groups as subjects and objects of actions, this is as doers and as things to which things are done" (Benson 10). In simplicity, ethics deals with individuals or groups who are performing deeds and their effects on the subjects as well as the objects of the deeds. Two major concerns for ethics in regard to food policy are human and animal ethics. In order to maximize food productions: genetically modified animals, feedlot animal farming technique, injecting animals with hormones and antibiotics are widespread practices. Dr. Jonathan Benthall is a socio-cultural anthropologist, who is a fervent animal right supporter and an animal right activist. He has written a dissertation, titled Animal Liberation and Rights in 2007, which explains in detail the philosophical aspect of animal ethics and legal rights of animals. He states, "genetic engineering and selective breeding appears to violate animal rights, because they involve manipulating animals for human ends as if the animals were nothing more than human property, rather than treating the animals as being of value in themselves" (Benthall 2). Genetically engineered organisms are

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Page 2 of 5 extremely controversial because they "refer to plants or animals created through the gene splicing techniques of biotechnology. They are foods created by merging DNA from different species", according to the World Health Organization (WHO). GMO animals have been banned from more than twenty-eight countries around the world such as Saudi Arabia, Peru, Germany, France, Russia and Norway (Sustainable Pulse). Public pressure for banning GMO animals in the United States and Canada has been growing due to the health concerns of citizens and the concerns regarding violation of animal ethics. Feedlot are feeding grounds, where animals are tightly packed together to be fed continuously with limited movement or socialization in order to quickly gain weight. Diets in feedlots are generally made up of 90% grain in order to increase their weight quickly due to the high level of carbohydrates in it (PETA). Additionally, animal farming consists of inserting growth hormones or steroids to quickly increase muscle mass and antibiotics to prevent the rapid spread of infections or viruses due to high population density in animal farms. These degrading and tortuous conditions for these animals are in place in order to meet our desire for attaining inexpensive meat. In order to offset costs, these conditions and technological advancements are needed and maybe required in order to feed a large global population. All these animal ethical issues are interconnected with human ethics, in regard to food policy because we as human beings consume these animals for our nutritional purposes. The pressure to ban these practices have been successful in a few countries due to the increase in public pressure for health and safety concerns. Several human ethical issues regarding genetically modified animals are due to the creation of new allergies, in regard to the gene splicing of two allergenic organism's traits into a single organism. Also, the creation of unknown viruses can occur, due to a mutation in genome of a genetically modified organism (WHO). Additionally, the widespread antibiotic resistant viruses and bacteria are due to the placement of antibiotics in animals, which is then consumed by humans. This causes us to become more immune to diseases but yet, creates the possibility of a mutating virus or bacteria which is antibiotic resistant through its random ability to survive and thrive in our fortified immune system. If we don't change our eating habits or at least our food policies to increase the protection of animal's ethic rights, than our future could become as Margaret Atwood penned in Oryx and Crake. If we continue to increase our capacity for genetically modified animals, than our chickens according to Atwood could look like "a large bulblike object that seemed to be covered with stippled whitish-yellow skin. Out of it came twenty thick fleshy tubes, and at the end of each tube another bulb was growing" (Atwood 202). In conclusion, our food policies should protect farm animal's ethical rights because it protects our health, safety and our ethical right of not consuming genetically modified foods or foods that have unnatural substances in it. If we do not change our legislation or food policies to expand the protection of farm animals, then in turn, our ethical rights will continue to be violated as well [1-9].

The issue of dealing with climate change should be a cornerstone to every single legislative policy for upcoming years, especially in regard to creating and readjusting food policies. According, to the National Oceanic and Atmospheric Administration (NOAA), climate change "is a change in the statistical distribution of weather patterns and when that change lasts for an extended period of time" (EPA). The effects of climate change are global effects ranging from unpredictable weather patterns, droughts, typhoons, melting of polar icecaps, rising sea levels, increase in average global temperatures and extinction of species. Edward O Wilson is an American biologist, researcher, theorist, naturalist and an author, who has written The Diversity of Life in 1992. He stated that, "I have said that the fifth or more species of plants and animals could vanish or be doomed to early extinction by the year 2020, unless better efforts are made to save them" (Wilson 330). This extreme loss of biodiversity is due to the destruction of natural habitat for agriculture farming for crops and cattle. Dr. Pablo Pacheco is a specialized researcher in the Amazon forest for the Center for International Forestry Research (CIFOR). He composed a research paper titled Smallholder Livelihoods, Wealth and Deforestation in the Eastern Amazon in 2009. In this paper he stated, that "in South America, almost 4 million hectares of forests are destroyed every year, 2.6 million of them in Brazil alone to accommodate the increase of industrial farms to generate coffee, chocolate and soybeans" (Pablo 29). Another climate change issue, which is generated by our current food consumption pattern, is the increase in greenhouse gases through the consumption of meat. The Royal Institute of International Affairs [4], commonly known as Chatham House, is a non-profit, nongovernmental organization based in London whose mission is to analyze and promote the understanding of major international issues [10-17].

At the Paris Conference of the Parties (COP21), Chatham House stated, "the livestock sector accounts for 15 per cent of global emissions, equivalent to exhaust emissions from all the vehicles in the world" (Chatham House 8). Moreover, "as incomes rise in the emerging economies, meat consumption is booming. If left unchecked, shifting diets, coupled with a growing population, would see global consumption increase by more than 75% by 2050" (Chatham House 8). The main greenhouse gas produced in the meat farming industry is methane and nitrous oxide. An average cow releases about 70 to 120 kg of methane every year and it is about twenty-three time more potent than carbon dioxide (IOP). Finally, the transportation and processing of foods creates large amounts of greenhouse gas emissions, thus increasing global warming. Sonja Vermeulen is a researcher for Consultative Group for International Agricultural Research (CGIAR) and a professor at University of Copenhagen. She has written a research paper titled Climate Change and Food Systems in 2012. In the paper it states, "agricultural production produces a majority of greenhouse-gas emissions from the food system, releasing up to 12,000 megatons of carbon dioxide equivalent in 2008- up to 86% of all food-related anthropogenic greenhouse-gas emissions" (Vermeulen 7). According to the Natural Resources Defense Council's Food Facts Report of 2007, stated that "between 1968 and 1998, world food production increased by 84 percent and the population by 91 percent, but food trade increased 184 percent. Today, the typical American prepared meal contains, on average, ingredients from at least five countries outside the United States" (NRDC 2). Also, "in 2005, the import of fruits, nuts, and vegetables into California by airplane released more than 70,000 tons of CO₂, which is equivalent to more than 12,000 cars on the road" (NRDC 2). Transportation of food products into another state or country has become a vital source for food availability because several people prefer certain food products to be available all-year round, even if their country is having an off season. Also, several countries do not produce enough food for themselves or certain types of foods are not grown at all in their country and this will create the need to import in food from other parts of the world. Also, processing raw fruits and vegetables require energy, resources and transportation as well, thus increasing the carbon footprint. In closure, we need to create food policies which will reduce the need to transport food products around the globe. Also, individual choices of eating locally grown foods or reducing the

varieties of foods which are not local will aid in the reduction of carbon footprint [18-30].

An array of human ethics, animal ethics, social justice issues and climate change issues are all intertwined with our current food policies and our current lifestyles. Our current food policies do not support to reduce these issues because our resistance to create a significant change in our global society or individual country's food policy has become passive. We as individuals need to be proactive in changing our ways of consuming food in order to minimize or curb as many of these issues as possible in an individual manner. Dr. Rod MacCrae performed a lecture at York University on the topic of Real Food for a Change: Opportunities to change the Canadian food system. In that lecture he stated a few ways in which we can curb these issues, based on our individual choices. He suggested buying local foods from the farmer themselves directly through farmer's markets, be part of communitysupported agriculture farms (CSAs) and be part of food box schemes. CSA's allows you to buy produce in terms of shares at the start of the growing season, meaning that you receive dividends in raw fruits and vegetables at the end of the growing season based on the shares you bought with the farmer. He suggested that we as individuals or as communities grow our own food in local gardens or arable spaces. Another suggestion was going vegetarian, vegan or reducing meat consumption in order to reduce farm animal's ethical issues and climate change issues related to meat consumption on an individual basis. Also, his suggestion was to boycott or limit purchases from dominant food retailers in order to directly or indirectly force them to consider more local foods, increase the availability of free range animal products and increase the availability of fair trade products. He explained that if we start to boycott or limit our purchases from dominant retailers and if they lose profit, then that will force them to consider our wishes because they "have thin profit margins of around 3.5%" (Lecture, March.1) [31-40]. Their financial interest and profits lies through bulk purchases of products from customers. Our refusal to purchase from dominant stores will inevitably lead them to adopt our wishes and include these options for cheaper prices. If there is an increase in stores around an area adopting these practices, then they will compete with each other in order to provide the most environmentally and ethically friendly product for the cheapest price. These were Dr. Rod MacRae's suggestion for individuals, who desired to curb as many of these issues as possible in regard to their food consumption.

Discussion

Individual decisions and choices are an important aspect into limiting these issues presented; but in order to truly restrict or erase these issues, we as a global society or at least individual countries need to create food policies which will aid in the restriction of farm animal's ethical violations, human ethical violations, social justice issues and climate change. As a community or society, we can embark on this journey by supporting cases such as "in 1979, Texas attorney Linda McKeever Bullard filed a class action lawsuit against the City of Houston and Browning-Ferris Industries to enjoin the siting of a municipal landfill in a predominantly black, middle class neighborhood" (Purifoy 3). The case was eventually won with the support of the Supreme Court and the decision of the federal court. But the real reason, this case was won was because of the massive outcry from Texans in regard, to supporting this town when a major company was illegally dumping toxic waste into the municipal's landfill. Dr. Rod MacRae's national legislative suggestion is to make

food part of health care, meaning that the government should subsidize, if not make healthy food gratuitous for everyone. He believes that this will "unleash the preventative power of food", meaning that if healthy food options are being provided to everyone, no matter what their socio-economic background is, than more people in this country will be healthy. In Canada, universal healthcare is being compensated by everyone, so if everyone is able to consume healthy food and live healthy lives; than in theory, we as a nation will not be spending an enormous amount of financial and medical resources to keep our citizens healthy. He also recommended that we adopt food sovereignty products nationwide and promote legislation, which promotes food sovereignty. The Declaration of Nyéléni, the first global forum on food sovereignty at Mali in 2007, states that "food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations" (Declaration of Nyéléni 2). Adopting food sovereignty legislation and products into Canada will probably eradicate the contribution that Canada makes towards these social justice issues, human ethical issues and animal ethical issues [41-55]. Additionally, it could also reduce Canada's greenhouse gas footprint in regard to food, if more Canadians became empowered from this ideology and created their own food products. Food Secure Canada's policy platform [1,7].

Conclusion

People's Food Policy for Canada, provides a detailed account of what food sovereignty could look like in Canada. Some of these ideologies are being translated into legislative policy through the massive activism from grass root organizations such as increase in availability of free range animals, government subsidies to farmers who are attempting to switch from conventional animal farming to free range animals and stringent labeling protocols for free range animal products or food sovereignty products. Dr. Rod's final advice was to promote food education and food citizenship programs for everyone in Canada, in order for them to become aware of their purchasing habits in regard to food [55]. Also, these program could include cooking classes, basic food guide towards healthy eating and several other tips, which will discourage people from buying pre-packaged foods, remind people to buy more locally grown or processed foods, energize people to buy as less processed foods as possible, entice people into buying food sovereignty products by educating them about the wide range of ethical issues and to remind everyone, that every single purchase you make becomes your voice in regards to what your choices are. Food will always play an integral part in human society; but, the issues revolving around it will depend on our choices and our beliefs because we cannot erase any of these issues without the complete support of everyone around the world in solidarity with each other and the cooperation of everyone through the creation of favorable food policies.

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