

BIGMUN 2023 ECOSOC

Research Report

Topic 3: Banning of meat products and discussing the cultural implications of meat production



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Introduction:

As studies have shown and experts have concluded, climate change is increasing at an unnatural rate due to human activities. Human-induced climate change has boomed alongside the industrial revolution. It is caused by an overconsumption of natural resources and the increase in emitted greenhouse gases, causing the average global temperature to rise, also known as global warming. As this will have a detrimental effect on the climate world leaders and experts have been searching for solutions and the cause of the problem. The UN has found that 27% of methane emissions caused by human activities come from livestock¹. There has therefore been a movement to limit the consumption of livestock in the human diet. This is seen to have many benefits, but also social and cultural disadvantages. This report will cover the background of this topic as well as other relevant information concerning solutions and previous attempts that aim to reduce emissions caused by livestock production.

Key Terms:

A HIC:

A country that falls under the category of “High-Income Countries.” These are defined by having a GNI (Gross National Income) per capita of 13,205 USD or more.²A

LIC:

A country that falls under the category of “Lower-Income Countries.” These are defined by having a GNI per capita below 1,085 USD.

Greenhouse Effect:

The natural process that allows short-wave radiation from the sun to be reflected, and trapped in the earth's atmosphere by greenhouse gases, which leads to the warming of the planet.

Ruminants:

A hooved and herbivorous mammal that has 3 to 4 stomach compartments, which allows it to gain nutrients from plants through fermentation.

Examples: Cows, Goats or Moose.

¹ “The Challenge.” *UNECE*, <https://unece.org/challenge>.

² “World Bank Country and Lending Groups.” *World Bank Country and Lending Groups – World Bank Data Help Desk*, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>.

Usd:

Usd is the abbreviation used for “United States Dollar.”

Background Information:

There is no exact date for when climate change enhanced by human activities started, nor when the first person thought to change our diets to combat it. Yet vegetarianism, leading a diet without meat of any kind, has been around since approximately 500 BCE. The idea of vegetarianism was first connected with spiritual or religious practices. One would cleanse themselves of the bloody rituals, either entirely, or for a couple of days. Many philosophers through time, such as Pythagoras, Plato, and later Peter Singer, have practised and praised the diet. Killing animals has been seen as a morally unjust and sinful act. Many religions, such as Buddhism and Brahmanism, adopted the idea that it was not in the nature of humans to brutally kill and inflict pain upon these animals. Later on, during the 17th and 18th centuries, it was also adopted by certain protestant groups, who wished to live entirely sinless life³.

In modern times it was especially Peter Singer who revisited the thoughts of animal rights and the idea that through mass farming of these animals for food, humans were ignoring the rights of the animals. Following this discussion came the discussion of whether a meatless diet could provide the nutrients needed for a balanced diet. Through scientific development, this worry has been disproven. However, what has been proven is that leading a balanced and adequate meatless diet can improve one's own general health, decreasing the chances of some diseases, such as heart disease, cancer or diabetes.⁴

Although historically a meatless diet has been chosen due to moral implications, or religious beliefs, as we have learned more about the environmental impact of developing large quantities of ruminant meat, there is also a growing trend in choosing a plant-forward diet to limit one's own carbon footprint. The growth in the number of global vegetarians is hard to measure, yet it can clearly be seen in the increase in vegetarian, or vegan, options on the market. Fortune Business Insights states that the predicted growth of the global vegan food market in the period 2021-2028 is 12.95%⁵.

³ Britannica, The Editors of Encyclopaedia. "vegetarianism". Encyclopedia Britannica, 23 Nov. 2022, <https://www.britannica.com/topic/vegetarianism>. Accessed 5 January 2023.

⁴ “Becoming a Vegetarian.” *Harvard Health*, 15 Apr. 2020, <https://www.health.harvard.edu/staying-healthy/becoming-a-vegetarian#:~:text=People%20become%20vegetarians%20for%20many,excessive%20use%20of%20environmental%20resources>.

⁵ “Vegan Food Market Size, Share & Covid-19 Impact Analysis, Product Type (Vegan Meat, Vegan Milk, and Others), Distribution Channel (Supermarkets/Hypermarkets, Convenience Stores, Online Retailers, and Others),

Whilst this seems conflict-free the conflict arises when considering the expenses of investing in the research needed to construct a balanced diet or the expenses of investing in the expansion of farming more vegetables and fruits in a sustainable way. It also becomes a problem when looking at the different country's economic situations. For example, according to Brent Kim, a programme officer at the John Hopkins Center for a Livable Future, LICs will need more livestock products to be able to tackle their current issues regarding malnutrition, before being able to switch to a plant-forward diet. This results in HICs needing to shift their diets further to be able to offset the emissions of the LICs. It is therefore the responsibility of the HICs to change their dietary habits immensely⁶⁷.

Other problems include the economic impact of getting rid of importing and exporting meat. It will cause a change for farmers, and therefore have an economic impact on the agricultural sector. As mentioned at a UN seminar on sustainable meat and livestock, there is a fear of punishing farmers for producing meat and livestock by banning their profession, or by changing the trends of the market so that less meat would be sold⁸.

Lastly, some biomes are better suited for the farming of animals than for crops. There are also some biomes which can produce certain types of crops but not others. This could lead to a need to import certain crops to be able to obtain the minerals and nutrients necessary. This would have an environmental impact because of transportation emissions.

In conclusion, there are many reasons for choosing a plant-based diet. The trend started due to moral and religious reasons yet has since developed. Although it also has implications which must be taken into account.

Major Countries or Organizations:

Brazil

Incorporates including more plants into one's diet in their national dietary guidelines, as of 2014.

Canada

and Regional Forecast, 2021-2028." *Vegan Food Market Size, Share and Growth Analysis [2028]*, Mar. 2022, <https://www.fortunebusinessinsights.com/vegan-food-market-106421>.

⁶ Carbon Brief Staff. "Experts: How Do Diets Need to Change to Meet Climate Targets?" *Carbon Brief*, 28 Sept. 7, <https://www.carbonbrief.org/experts-how-do-diets-need-to-change-to-meet-climate-targets/>.

⁸ UNECE, director. *Seminar on Sustainable Meat and Livestock Production. YouTube*, YouTube, 5 Oct. 2022, https://www.youtube.com/watch?v=PyYRapMyC_A. Accessed 5 Jan. 2023.

Has included the sustainability factor of certain diets within their national dietary guidelines, as of 2019. Specifically recommends having a diet which includes higher levels of plant intake.

FAO

Food and Agriculture Organization of the United Nations, works with and promotes sustainable food and agriculture. They work to have sustainability of food and agriculture included within individual governments and ensure the sustainability of the development of food and agriculture around the globe, to help achieve zero hunger.

Germany:

Promotes a plant forward diet for both health and environmental reasons in their national dietary guidelines, as of 2014.

Norway:

Within Norway's national dietary guidelines it mentions the sustainability of leading a plant forward diet, as of 2015.

Qatar:

Includes guidelines and reasoning as to how and why one should lead a plant forward diet with minimal waste in their national dietary guidelines as of 2015

Sweden:

Includes a description of which foods are most environmentally friendly and stresses the impact of agricultural emissions in their national dietary guideline, as of 2015.

Switzerland:

Includes in national health guidelines the values of eating sustainably including avoiding food waste and a preference of seasonal plant food, as of 2016⁹.

United Nation:

⁹ "Sustainability within National Dietary Guidelines." Edited by Anna DeMello and Jono Drew, *Which Countries Have Included Sustainability within Their National Dietary Guidelines?*, <https://themouthful.org/article-sustainable-dietary-guidelines>.

With sustainable production of agriculture being part of the 17 sustainable development goals, the UN strives towards achieving it across borders, as well as helps other sub-organisations.

UNECE:

UNECE is the UN's environmental department which works with promoting sustainable solutions and investigating trends, causations and correlations regarding climate change, this includes the impact of agricultural practices.

Relevant UN Resolutions:

[E/RES/2020/17](#)

These resolutions encourage creating legally binding rules to enhance the sustainability of different regions. It also creates a tool for member-states to use to achieve sustainability. Lastly, it works to help with a country-needs-based approach.

[E/RES/2018/25](#)

This resolution supports and encourages further support to create a new organisation outside of the UN systems that aim to alleviate poverty through sustainable agriculture, showing their support in the matter. Also supports giving a new organization, the Centre for Alleviation of Poverty through Sustainable agriculture, financial and in-kind aid.

Previous Attempts to Solve the Issue:

As mentioned previously some countries have taken a step forward and included sustainability as part of their national dietary guidelines. This is one way to attempt to solve the issue. Whilst this is a step towards sustainability it has not solved the issue. As mentioned previously there have also been some resolutions made regarding this issue yet they all talk about the issue in more vague terms when it comes to solving it. Therefore previous attempts are limited. This may be due to a different focus on tackling climate change, such as a focus on renewable energy.

Some countries have implemented a meat tax. This means adding an extra payment fee for buying meat to discourage consumers. These countries include Germany, New Zealand, Spain, Switzerland, and the Netherlands. The way these taxes are done varies from

country to country. Some are on meat and dairy, some are on products with high environmental impacts, and others on agriculture in general¹⁰. These taxations are all relatively new and are therefore not conclusive as to their participation in reducing emissions.

Possible Solutions:

Some possible solutions include banning the production of ruminant meat, as that is the one that causes the most emissions. Another could be to place a meat tax on high-emission livestock products. The benefits of this could be that it may reduce the consumption and therefore production of these high-emission products. Another benefit would be that it would provide more space for other crops and for reforestation, as much land is spent on livestock farming. A disadvantage is that this would harm and punish the livestock sector and those who provide it.

Another solution could be to invest in and create more genetically grown meat. This is done by taking a stem cell from an animal and then synthetically growing it. The meat would take 3 months to mature compared to the otherwise 10¹¹. The benefit of this solution is that it would allow humans to still eat meat, whilst reducing emissions. The disadvantages are that it would harm the agricultural sector, as well as cost a lot to produce, to begin with, as although the technology has been developed, it has not been upscaled to large-scale productions.

An alternative solution could be to change the diet of the cows. Studies have shown that feeding cows a more high-fibre diet that would be easier to digest and therefore emit less. For example, changing 1% of the cow's diet to seaweed was found to reduce emissions and not alter the taste of the milk. It is yet to be concluded upon the effect on beef cattle¹². It is also unknown whether this would reduce emissions enough to have a larger impact. The benefits of this solution are that it would not harm the agricultural sector and would pave a

¹⁰ Remmers, Jeroom. "Increasing Number of Countries Start Taxing Meat and Dairy." *True Animal Protein Price Coalition*, True Animal Protein Price Coalition, 29 Nov. 2021, <https://www.tappcoalition.eu/nieuws/16831/increasing-number-of-countries-start-taxing-meat-and-dairy-#:~:text=>

<https://www.tappcoalition.eu/nieuws/16831/increasing-number-of-countries-start-taxing-meat-and-dairy-#:~:text=>Spain%2C%20Switzerland%2C%20New%20Zealand%2C%20Germany%20and%20the%20Netherlands.

¹¹ Mattick, Carolyn, and Brad Allenby. "The Future Of Meat." *JSTOR*, Arizona State University, 2013, <https://www.jstor.org/stable/43315822>.

¹² Quinton, Amy. "Cows and Climate Change." *UC Davis*, 30 Sept. 2022, <https://www.ucdavis.edu/food/news/making-cattle-more-sustainable#:~:text=Livestock%20are%20responsible%20for%2014.5,methane%20over%20their%20lifetime>.

¹² Quinton, Amy. "Cows and Climate Change." *UC Davis*, 30 Sept. 2022, <https://www.ucdavis.edu/food/news/making-cattle-more-sustainable#:~:text=Livestock%20are%20responsible%20for%2014.5,methane%20over%20their%20lifetime>.

way for seaweed farming to enter the business sector. Some disadvantages are that it is uncertain and that it may not limit emissions enough¹².

Bibliography:

- “Becoming a Vegetarian.” *Harvard Health*, 15 Apr. 2020, <https://www.health.harvard.edu/staying-healthy/becoming-a-vegetarian#:~:text=People%20become%20vegetarians%20for%20many,excessive%20use%20of%20environmental%20resources.>
- Britannica, The Editors of Encyclopaedia. "vegetarianism". *Encyclopedia Britannica*, 23 Nov. 2022, <https://www.britannica.com/topic/vegetarianism>. Accessed 5 January 2023.
- Carbon Brief Staff. “Experts: How Do Diets Need to Change to Meet Climate Targets?” *Carbon Brief*, 28 Sept. 2020, <https://www.carbonbrief.org/experts-how-do-diets-need-to-change-to-meet-climate-targets/>.
- “The Challenge.” *UNECE*, <https://unece.org/challenge>.
- Mattick, Carolyn, and Brad Allenby. “The Future Of Meat.” *JSTOR*, Arizona State University, 2013, <https://www.jstor.org/stable/43315822>.
- Quinton, Amy. “Cows and Climate Change.” *UC Davis*, 30 Sept. 2022, <https://www.ucdavis.edu/food/news/making-cattle-more-sustainable#:~:text=Livestock%20are%20responsible%20for%2014.5,more%20methane%20over%20their%20lifetime.>
- Remmers, Jeroom. “Increasing Number of Countries Start Taxing Meat and Dairy.” *True Animal Protein Price Coalition*, True Animal Protein Price Coalition, 29 Nov. 2021, <https://www.tappcoalition.eu/nieuws/16831/increasing-number-of-countries-start-taxing-meat-and-dairy-#:~:text=Spain%2C%20Switzerland%2C%20New%20Zealand%2C%20Germany%20and%20the%20Netherlands.>
- “Sustainability within National Dietary Guidelines.” Edited by Anna DeMello and Jono Drew, *Which Countries Have Included Sustainability within Their National Dietary Guidelines?*, <https://themouthful.org/article-sustainable-dietary-guidelines>.
- UNECE, director. *Seminar on Sustainable Meat and Livestock Production*. YouTube, YouTube, 5 Oct. 2022, https://www.youtube.com/watch?v=PyYRapMyC_A. Accessed 5 Jan. 2023.
- “Vegan Food Market Size, Share & Covid-19 Impact Analysis, Product Type (Vegan Meat, Vegan Milk, and Others), Distribution Channel (Supermarkets/Hypermarkets, Convenience Stores, Online Retailers, and Others), and Regional Forecast, 2021-2028.” *Vegan Food Market Size, Share and Growth Analysis [2028]*, Mar. 2022, <https://www.fortunebusinessinsights.com/vegan-food-market-106421>.
- “World Bank Country and Lending Groups.” *World Bank Country and Lending Groups – World Bank Data Help Desk*, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>.