



UNEA

United Nations Environment Assembly
of the United Nations Environment Programme

Background Paper

Committee: UNEA

Topic: Pollution Caused By The Food Industry

Chairs: Galilea Gallegos Pozo, Ana Sofia Quinteros Botello & Barbara Antunez Medrano

The food industry has prioritized money over anything else since the first agricultural revolution, this was the turning point when the environment stopped being important for commercial agriculture. There are many ways in which the food industry pollutes our earth, like deforestation, overproduction of greenhouse gasses, massive fires to clear fields, and more. Agriculture accounts for one-third of the global greenhouse gas emissions and it will keep going up according to our consumption. Overproduction, overconsumption, and new technologies all contribute to the contamination caused by the food industry; if people over consume, companies will overproduce making them unsustainable. According to the Natural Resources Institute in Finland, “Food production contributes, for example, to climate change, eutrophication, and acid rain, as well as the depletion of biodiversity. It is also a considerable drain on other resources, such as nutrients, land area, energy, and water.”

Different parts of the food industry contribute to different kinds of pollution and contamination. First, the meat industry, because of the amount of land needed to house all of these animals so the factory can work, farmers need to clear out fields, which causes deforestation and CO₂ produced by slash and burn agriculture (creating fires to clear fields). Apart from land to live in, animals also need food, which causes pollution as well, as mentioned in an article by The Clean Air Council (CAC), “Nitrogen fertilizer used to grow the feed produces nitrous oxide, a potent greenhouse gas that causes nearly 300 times more warming than CO₂ and depletes the ozone layer.” Animals also produce manure, which comes with a huge dispersal of greenhouse gasses like ammonia, methane, and CO₂. The CAC also claims that the meat industry is responsible for 18% of all global greenhouse gas emissions.

Industrial agriculture produces greenhouse gasses, affects biodiversity, and according to estimates, costs the environment about 3 trillion US dollars each year. Many farmers cleanse or protect their crops by using fertilizers and pesticides, which generate

dangerous greenhouse gasses and can also pollute water with the runoff from fields. Nitrogen-based fertilizers are made from synthetic nitrogen and hydrogen-based ammonia, because of the industrialized form of farming, fertilizers can be overused, and this issue causes emissions of excess modified nitrogen into the atmosphere where it can become a potent greenhouse gas: nitrous oxide. An article written by the UNECE explains this issue very clearly, "Agriculture is the single largest contributor of ammonia pollution as well as emitting other nitrogen compounds. This affects soil quality and thus the very capacity of the soil to sustain plant and animal productivity. In addition, the growing trade in agricultural products in the last few decades has further increased the amount of pollution emitted from the intensification process in producer countries. As this burden remains in the producer country, it creates an imbalance and shifts the pollution problem from the importing countries to the producer," this gives us a clearer view of how much the agroindustry contaminates our planet.

The production of food isn't the only issue in the food industry, the waste produced also pollutes the earth; food waste generates 3.3 billion tons of carbon dioxide. According to the FAO "Agricultural production, at 33 percent, is responsible for the greatest amount of total food wastage volumes." By wasting food, we don't take into consideration the amount of contamination it took to produce, package, and transport it; adding to that, when food rots it creates methane, a very powerful greenhouse gas. About one-third of the food that is produced each year globally gets wasted, that's equal to 1.3 billion tons of food. This means that all that food will generate powerful greenhouse gasses into the atmosphere. Even with all that wasted food, there are still hungry people all around the world, which begs the question: How are we producing and wasting so much food all at the same time?

The food industry is a major contributor of contamination all around the world, from its production to transportation, to packaging, to its modernization and industrialization. We all need to pay attention to how much contamination something as simple as food generates, instead of only focusing on the cheap cost of production. The false advertising of this industrial food system makes it seem as if consumers are buying from a local farm, instead of big business feedlots, which leads to further issues involving agriculture. . Investigating where your food comes from is very important to the future of our Earth.

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