The Negative Environmental Consequences of Consuming Beef

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Cows, unlike many other animals, have a special type of digestive system that creates a gas called methane (CH_4), an extremely potent greenhouse gas that is 28 times more potent than carbon dioxide (CO_2). Cattle is the number 1 agricultural source of greenhouse gas emissions globally. Not only is it detrimental to the environment, the process from raising the cow to eating only selected portions of the cow creates a huge environmental footprint, and is hugely energy inefficient.

Grazing

Grazing is when animals eat off from naturally growing grass. Cows that graze freely in free-range farms often leads to a phenomenon known as Tragedy of the Commons. This describes a piece of publicly owned land or water source that is being overused and exploited by different parties, resulting in a detrimental outcome that has been achieved by collaborative efforts.

When grass is overgrazed, levels of carbon dioxide in the atmosphere increases, because of the reduced amount of photosynthesis. Additionally, the removal of plantation from the soil can expose the topsoil to external weathering such as wind, rain and pressure, which may lead to soil erosion and soil degradation. Once the soil becomes eroded and degraded, the piece of land may become desertified, which creates almost an impossible environment for plants to live in, posing a threat to biodiversity.

Methane

As previously mentioned, the digestive system of cattle produces methane and becomes exposed to the air through burping or farting. Methane releases large amounts of heat through the greenhouse effect, and as the gas is hugely abundant, global warming is escalated and exacerbated.

Inefficient use of Energy

Beef is a very inefficient source of food for humans, because it has a large environmental footprint. First, farmers have to grow crops over a period of time in order to feed the cows. Then, as part of the 10% rule, 90% of energy is lost when the crops are fed to the cows. It is only after a long period of consumption of these crops for the cow to be sold. Since only a small fraction of the cow can be sold to the consumer, this results in an even more inefficient use of energy.

Works Cited

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