

Geography of Environmental Destruction

Humanity has been spoiling the precious environment for many decades, and the consequences are beginning to become evident. All of the Earth's resources are essential for life: resources such as clean air, clean water, and clean soil. The consequences of abusing these presents humanity with new challenges each year such as increasing natural disasters, rising sea levels, and increasing global temperatures. The causes of these consequences cannot be placed on humanity as a whole. Rather, there is a small group of nations responsible for contributing huge amounts of carbon dioxide to the atmosphere, and millions of tons of pollution and waste into the world. Which nations are responsible? What factors determine which areas of the world these super-polluters are located? Read on, my friend. For, in this paper I will prove that geography is still relevant for understanding why there are differences of environmental destruction between states. First, I will discuss how CO₂ emissions are much higher in some countries compared to others. Second, I will use examples from *The Wal-Mart Effect* to discuss environmental damage occurring in Chile caused by the intensive salmon farming industry. Finally, I will explain why China is the largest recycler of waste and why there is so much pollution from recycling, citing examples described in the book *Junkyard Planet*.

As described in *Global Shift* by Peter Dicken, the CO₂ levels are much higher in the United States and China compared to other countries. In 2011, the biggest emitters of CO₂ in the world were China (26.8 percent) and the United States (17.9 percent). Together, these countries produced just under half of the world's total emissions (Dicken). There are many reasons why China is the largest polluter in the world. Adam Minter states in *Junkyard Planet* that inefficient energy systems in China are far more polluting than in the United States (Minter). China is the

largest polluter in the world because they are also the largest manufacturing hub. The country became a major global power in the economy due to its massive population of cheap labor, and an economy that is very open to trade (Dicken). And it is no surprise that China has a huge demand for raw materials, especially scrap metal and plastics to feed its massive industries. Due to the demand, most of the world's scrap metal and recyclable plastics are shipped to China (Minter). This is why China is also one of the largest recycling hubs in the world. China is experiencing huge economic growth due to the export of manufactured goods and the import of raw materials that can be used in production. Recycling is a benefit to the environment by serving as an alternative to harvesting “virgin” materials, but the process of recycling also creates many problems. In China, where much of the world's copper recycling occurs, the plastic wire insulation is often burned to clean the copper and toxic chemicals are released into the atmosphere each day.

There are many consequences to the concentration of manufacturing and economic growth in China. Mainly, this growth has occurred at the expense of environmental pollution such as high levels of air pollution and toxic waste being dumped into the environment. And as population and demand increases, so does the amount of pollution. In 2016 The World Bank reported that China's large population of 1.37 billion people is consuming more and more as the population transitions from low to middle class status. Professor Cheng Zheng-Kang states in his paper *A Brief Introduction to Environmental Law in China* that a combination of several factors such as huge uneducated population, old inefficient equipment, and political mistakes by the Chinese government are responsible for the environmental crisis China is facing today. Due to all these reasons, geography is still relevant for understanding why there are differences of pollution such as high levels of CO₂ emissions between states, especially China.

Chile is another example of how geography determines where environmental destruction occurs. The salmon industry began in Chile due to many young businessmen in Chile that decided to build up the industry due to the opportunity of supplying the United States. The coastline of Chile is ideal for salmon farming because the inlets and fjords provide protection for the ocean pens of fish farms (Fishman). Salmon farming is a consumer driven industry and corporations are buying by the ton because there is a huge demand in the United States for cheap salmon. However, there are consequences with the concentration of salmon farms in the ocean. Salmon farming results in unnatural amounts of waste in a small area, which affects the seafloor and the surrounding environment. Fish feed contains antibiotics and other chemicals to grow the fish, and any excess feed that settles to the ocean floor only adds to the pollution problem. The amount of pollution can be very intense in an area, as on average there can be up to 1.5 million salmon per farm (Fishman). The pollution caused by salmon farming in Chile is an example of how geography is still relevant for understanding why there are differences of environmental destruction between states.

The case of Chile is similar to China because they also offer cheap labor and an unregulated environment, and industry flourishes. And Chile's proximity to the United States makes it an ideal place to grow the salmon and then ship them to the United States within a day. Chile began salmon farming in the 1980's, and quickly grew to be the largest salmon producing country in the world. Just how large is that? Charles Fishman describes in his book *The Wal-Mart Effect* that in 1985, the total world farmed-salmon harvest for the year was fifty thousand metric tons. As Fishman reports in *The Wal-Mart Effect*, "twenty years later, in 2005, Chile sent ten thousand metric tons, just to the United States, just in January" (Fishman). Ten thousand metric tons is the

equivalent of the same weight as 167 loaded commercial jets. That is the amount of fish Americans consumed in one month.

Finally, I will explain why China is the largest recycler of waste and why there is so much pollution from recycling, citing examples described in the book *Junkyard Planet*. The biggest producers of waste are the United States and China. In 2007, the US generated 254 million pounds of municipal solid waste, and in 2005 China generated 155 million tons in (Dicken). And these statistics are increasing each year, as population increases. Municipal solid waste (MSW) is everything that is thrown away such as packaging, food scraps, sofas, and computers. China is a huge recycler of MSW because there is a lot of value in the raw materials in waste. The recycling of electronic devices such as computers is one example, because most of the world's electronics manufacturers are located in China and they require raw materials. However, the process of recycling electronics is dangerous to people's health and the environment. Guiyu is where most of the recycling of electronic waste occurs in China, and a 2010 study found that 81.8 percent of children are suffering from lead poisoning (Minter). This demonstrates that the amount of pollution is directly correlated to areas where industry and recycling are most heavily located.

The movement of waste in the world is a huge industry that is very profitable. For example, the United States exported \$3.1 billion in scrap to China in 2004 (Dicken). And just like with the flow of scrap metal, the flow of reusable electronic waste to China is another. China has a very high demand for electronics as the population moves towards middle and high class. As consumption of electronics increases however, so does the amount of waste that is generated. The recycling of electronic waste may stay in China, or as the economies of the world continue to develop, the recycling industries may shift to the next country that is developing and has a

large demand for raw materials. History shows that where humans build their countries and cities and industries is determined by, and shifts around due to geography. In the first half of the 20th century, the United States was the most powerful economical force and top manufacturing country. Now, in the beginning of the 21st century China become the main economical and manufacturing force.

I have given many examples to demonstrate that geography is still relevant for understanding why there are differences of environmental destruction between states. I explained why and how China is experiencing huge economic growth, and at the same time is experiencing major environmental degradation caused by pollution. I discussed how CO₂ emissions are much higher in some countries than in others, such as China compared to the rest of the world. I also used the example of Chile to show how a particular industry can thrive when there are lax environmental regulations and cheap labor. Finally, I explained why China is the largest recycler of waste, and why there is so much pollution from recycling. Geography has determined that countries such as China have become such huge polluters and massive economic powers. And countries with that much power are ultimately responsible for the condition of the world because pollution affects everyone on a global scale.

Bibliography

Dicken, Peter. Global Shift Seventh Edition . New York: Guilford Publications, Inc. , 2015.

Fishman, Charles. The Wal-Mart Effect. New York: Penguin Group, 2007.

Minter, Adam. Junkyard Planet. New York: Bloomsbury Press, 2015.

The World Bank. China. 2010. 2017 <<https://data.worldbank.org/country/china?view=chart>>.

Zheng, Cheng. "A Brief Introduction to Environmental Law in China ." 1986.