Aspects Of Food Security

Introduction to Food Security

Within the topic of Food security you will find two sub-topics, one is food security and the other is food insecurity, Food security is most often defined as, “access by all people at all times to enough food for an active, healthy life” (AIFS, 2011) whereas food insecurity is defined as; 'whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable food in socially acceptable ways is limited or uncertain'. (AIFS, 2011)

These two sub topics are almost always the cause of someone’s wealth or someone’s lack of wealth. A first world country is much more likely to have a stable food security due to its developed infrastructure and research into food security. While in a third world country, food insecurity is far more prominent due to a lack of infrastructure and research.

Food security isn’t just experienced in poor countries, in the coming years food insecurity will be plaguing all our food industries. This is due to a process called bio-accumulation, bio-accumulation is a gradual build-up of substances like pesticides and other chemicals into organisms. Bioaccumulation occurs when an organism absorbs a harmful substance faster than it can excrete it. Eventually it infects the entire food chain, where an organism eats another that has accumulated harmful substances. And then we kill it, harvest it or catch it and eat it. Then we have all the chemicals in our bodies that the organism had absorbed.

Food security can influence, economic growth and job creation, poverty reduction, trade opportunities between countries and health and healthcare. (USDA National Institute of Food and Agriculture)

This report will outline the environmental, social and economic sustainability aspects of food security.

Environmental Aspects of Food Security

Due to aspects in our world such as climate change, habitat loss and bioaccumulation. All kinds of species of flora and fauna that we eat for food have had to adapt. Most of the species that we have affected have been completely wiped out. So how can we make the food system safer for us and more sustainable for the environment?

Eating locally doesn’t just make it cheaper to bring food into a country, but it reduces carbon emissions that would otherwise be spent importing the food, by doing this you are also reducing the risk of bioaccumulation, as you know where the food has been. This decreases the time that it usually takes for food to be distributed.

Eat food depending on the season, as more of it can be created and the food doesn’t have to be genetically modified for it to grow larger or in a different environment.

Avoid additives and pesticides by only eating organic food, livestock farmers often use synthetic

pesticides, fertilizers and antibiotics to make sure that their crops and animals grow in the shortest amount of time so they can get more money. However, these chemicals are harmful to us and the environment, especially when pesticides are sprayed onto the Earth. (Eco-warrior, 2018)

This image shows the crop yields reducing due to climate change in the more arid (dry) and hot regions. Crops grow in the wetter, more tropical land. And because of climate change and urban sprawl these places are reducing. For a country like Africa it is almost impossible for them to produce enough crops to be sustainable.

Economic Aspects of Food Security

This graph shows the population growth of the world from 1750 all the way up to 2150. What is clear is that the world's population is increasing at a rapid rate, but our developed population is plateauing. This is a major problem for food security. It means that as the population grows, more and more people are being left without access to nutritional and safe food and as we can see the population Is growing exponentially.

Clearly, countries are struggling to maintain their supply over the demand, mostly because of the lack of wealth and infrastructure to support their population. They need to find a way to produce more food while keeping money in the economy.

A good way to do this is to grow and harvest food domestically or locally, doing this means a eco-friendlier way to make food. While feeding all the money made back into that countries economy, doing this boosts local businesses and it will become easier and easier to create more food with less money.

A huge factor of food insecurity is due to arable land loss. Arable land represents the type of land that is crucial for crops and livestock to grow and be harvested. Due to urban sprawl we are losing arable land at an alarming rate and because so many people are choosing farming as an occupation, hardly anyone can find land, so food prices rise due to the small amount of crops produced on non-arable land. By 2050 demand for food will be 60 percent greater than today (WeForum, 2019).

Social Aspects of Food Security

Food security is reflective on a household's socioeconomic status, meaning people that are wealthy and live in a more developed country always have more food security than the latter.

A study was done in 2012 to show the relationship between people with low food security in a less developed country and their social cohesion. It showed that people with low food security experienced high social deprivation and low social cohesion (ability to work with someone). This shows that people with a low socioeconomic status and less food security experience a greater lack of social skills than a normal person. (NCBI, 2012)

Some of the ways that we can increase food production while lowering the impact on communities that experience food insecurity are; investment and facilitation into innovations and development of low socioeconomic countries, in a cost-effective and sustainable way that

improves the overall nutrition that less developed countries consume. (WeForum, 2019)

Growing locally, to provide organic food that hasn’t been imported from another country which would reduce a carbon footprint. And provide economic growth to a local community.

Conclusion

Different aspects of food security all contribute and point to one idea. Food security is highly dependent on a country or household socioeconomic status. Ways to reduce food security as a whole, are as follows; buying locally, eat food seasonally, invest in innovation and nutrition for less developed countries, reducing carbon emissions and reducing urban sprawl.