SUST 101 Module 4 Paper

(Note how the sources and concepts are in **bold** text.)

One of the main focuses of module 4, especially in unit 5 was the ways that the population has been able to increase and boom over the last 200 years due to agricultural and medical advances. Unit 5 did a brief overview of this focusing on the fact that we are living longer, dying less, and our populations are condensing all leading to population growth. Unit 7 focused in more on one of the reasons why we are living longer: GMOs, both crops and animals. These GMOs help make more food grow, often in shorter amounts of time and requiring less space, allowing for less real estate for crops and more for humans, also contributing to the growth of the human population. The main three contributors to population growth are fertility (the average amount of children that women have), mortality (the average death rate), and lastly migration (the influx of people from other regions). All three of these can also be affected by our three pillar factors, environmental, economical, and cultural; these factors can either push a population to expand for security or provide the security for them to expand.

Unit 7 focuses on the GMOs and both crops and animals are being **genetically engineered** and modified in order to feed our increasing population. The word of caution is focused on the chemicals (**pesticides and fertilizers**) that are all going into/onto the food we eat. Similarly to the DDT health issue where the amount of DDT that was run off from farms was building in the river waters then in aquatic life, then in the fish that eagles would eat eventually leading to the eagles having health problems. The issue of all these genetic modifications and then herbicides, pesticides, hormones and unnatural additives is that they aren't tested by anyone with a fully systemic analysis. How do all these interact with each other? **What is the long-term plan and is this sustainable**? My prediction is that in the next 50-100 years there will be a discovery proving the health damages that all these chemicals have on us when they interact and build up over time. Another figure that shocked me in this section was that

only about 4% of produce from the US and the EU are **organic**. It just goes to show how businesses are focused more on quantity rather than quality.

Speaking of businesses, we did also read about capitalism and the **environment**, how some are pushing for more social responsibility from corporations and are trying to work with them so that the encounter can be mutually beneficial. This approach would be beneficial as it would likely lead to progressive change over time but it is highly susceptible to corruption. We have seen corruption turn politicians and other "leaders" from good to bad. To expect citizen volunteers acting as chair-members to be better is faulty and therefor the best method of any **social responsibility** would be for the community to vote and approve changes, which is when businesses begin to be controlled by the people... entering in socialism/communism. The alternative to this would be for the corporations to take on the responsibility and see the long-term savings and benefits from shifting to greener practices. Companies such as Apple have made huge strides in cutting down waste, reusing aluminum from phones in new computers, reusing paper in new packaging, ensuring employees are well taken care of and that partnering companies also work towards a more **sustainable business model**. It just goes to show how greed can indeed be green, but how green? Just as with project drawdown there are ways to save money, but that money is therefore out of the system—it might be seen by companies as an undesirable method since they want all of the money they can get. It just comes down to meme complexes (or **cultural values**) and changing how we think. We need a movement to change the people's thoughts and the rest of the human market and world will follow the people (or at least their money).