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Solving the Food Dilemma

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## SOLVING THE FOOD DILEMMA

### Abstract

Ever since the implementation of agriculture in human society about 23,000 years ago, humanity has been dependent of agriculture to feed society. Today the exponential increase in human population is placing tremendous pressure on the food and agriculture systems to meet an insatiable demand. Farming the same crops and livestock on a large scale has proved an efficient means of production, but has many issues. The conventional production of crops is more efficient than ever, but at great cost to the environment. Chemicals used in crop production harm the health of humans and the environment. Soil health is often overlooked, but in reality it is crucial to the continued success of agriculture. To meet the needs of the population there are many answers today that provide solutions, however the challenge is implementing these solutions rapidly on a large scale.

*Keywords:* Agriculture, food, environment, population

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Food and agriculture are essential to our survival as human beings, because without food than humanity has little chance of continuing to thrive on the planet. I plan to focus specifically on supporting the efforts of local food production. We need local people in communities worldwide to each produce food on their own land, no matter what size their garden is. The sum of the effect of local gardens will add up to make a huge difference. One additional benefit to local food production is the increase in vegetation, which will pull carbon dioxide out of the atmosphere. In the near future I envision a world of people that are more conscious about the impacts they have by their choice of diet. I envision a world in which all the wasted land (lawns, highway median strips, etc.) is converted into healthy environments and areas of sustainable agriculture production. My role models include Will Allen and Joel Salatin, who both use sustainable practices to grow fresh food that people need while also healing the land.

### The Key Issues:

1. Food deserts and obesity: lack of fresh healthy food

People that live in lower class areas do not have easy access to fresh fruits and vegetables.

One example of this is people that live in low income areas of New Orleans. The South is not known for healthy eating to begin with, and for the people that live in lower income areas of New Orleans it can be impossible to find freshly produced fruits and vegetables.

Not to mention that even for people that may have access to fresh food, it is not always affordable.

What is easily accessible is fast food and other unhealthy processed foods. This leads to entire communities having health problems, including obesity (even in children!). As

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stated in by Brinkman (2016) in his book, “most nutritionists would find a diet that consists of fast food and food from convenience stores hazardous to our-long term health”(p.131).

### 2. Factory farming and conventional tillage

Ever since the implementation of the Haber-Bosch nitrogen fixation process, the productivity of farms worldwide has exponentially increased. The best example of this was during post-World War Two era in the United States, there was a huge increase in agricultural productivity due to fertilizer development. Today, productivity and efficiency are even more important due to the pressures of ever increasing demands. One way that farmers and corporations have met increasing demands is through the use of factory farms for livestock operations. Problems with this include huge amounts of waste that harms the environment and the unethical treatment of animals. As stated by Brinkman (2016), “meat production alone accounts for approximately 18% of greenhouse gas emissions, including approximately 30% of the world’s methane production” (p. 127). Farmers have also began growing grains in a more efficient but environmentally damaging way. With the implementation of GMO crops and fertilizers and other chemicals, farmers are doing their best to control the land, instead of work with it. Intensive farming operations that are considered “efficient” are only feasible for a short amount of time until the land is degraded and the soil ecosystem becomes exhausted and dies out.

### 3. Soil health and erosion

This brings us to the next issue, which is soil health and erosion. The intensive farming methods such as described above degrade soil health by removing nutrients after each

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crop rotation is grown and harvested. These nutrients are never completely replaced, and the pesticides and other chemicals kill of the good soil microorganisms that benefit the plants. When cared for properly, healthy soil can increase crop yields without all of the chemicals used today. The chemicals used in agriculture also obviously pose a significant health risk, to humans and the environment.

The reduction in soil health also leads to increases in soil erosion, because the organic material that is created by the soil flora holds soil together. As flora is killed off, the soil is more easily washed and blown away by the weather elements. A perfect example of this is the Dust Bowl in the 1930's.

What do I plan to do about the issue? The results of my character survey indicated that I am curious and creative. I envision this benefitting me by planning and designing efficient garden systems that can do a variety of roles. I want to design sustainable landscape systems that can host food production, pollinator habitat, storm water management, and native plant species. Through my creative mind I plan to create systems that are visually appealing and functional. I also highly value a lifelong love of learning, so I will always be ready to accept mistakes or failures and learn how and where to make improvements in anything that I do. The results of my Sullitest also show that I have the mindset, personal skills, and ability to work with others to accomplish my vision.

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## References

Brinkman, Robert (2016). *Introduction to Sustainability*. Chichester. John Wiley & Sons Ltd.