

As our society progresses through time it has become increasingly difficult to provide enough food for the world. Where once the earth was ruled by farmland, now concrete cities cover the grassy fields. There is far less land available for growing food, and that in combination with the growing population is a recipe for disaster. I believe that the solution to this problem can be found in the very cities that caused it: skyscrapers. When we ran out of space to build houses, we built up! Why not do the same with farming?

Rather than containing housing units, each floor would be used as a space to grow crops. Having crops grown indoors would have many benefits and could take agriculture to an entirely new level of productivity. Bug infestation, disease, and weeds are some of the most common factors in the loss of a crop. By having the crops grown indoors and isolated, all of these issues could be heavily reduced, if not completely eradicated. Similar to a fire sprinkler system found in many buildings, an irrigation sprinkler system would be created above each floor, providing an easy and effective way to water the plants. Another, and one of the most appealing, benefits of this invention would be the use of temperature control. Picture a greenhouse, but add 40 floors. This would allow farmers to grow crops that would not typically be grown in their region, and would allow them to grow said crops year round! The amount of food being produced would triple in size allowing for more distribution of crops to impoverished countries.

Of course, with every set of benefits comes a set of roadblocks to overcome. While having each floor stacked above one another frees up a lot of space, it also prevents the crops from accessing direct sunlight. Thankfully, indoor growing is nothing new to agriculture, albeit not on such a large scale. Rather than normal light bulbs, the floors would have grow lights installed. These light bulbs provide as close to natural sunlight as we are currently able to produce. While this is definitely more expensive, it can also be seen as an advantage as it would allow farmers to control how much "sun" their crops receive. This is just another example of how these buildings could increase crop yields.

Every year, around 9 million people die of hunger. It's a growing concern that needs to be addressed, and with inventions like skyscraper farms we have the opportunity to take that leap towards solving these issues. It's a daunting task, but enough funding and hard work could turn this idea into a reality. With the new technologies we are creating every day, it's a bright future for agriculture, and I believe that this invention could be the start we need.