

A fix for the growing population

A human crisis of unpredicted proportions is in the making. In fact, with more than 100,000 people being born every day, population levels continue to rise, not staying at any constant equilibrium. The earth is continuously having to adapt to humans demanding needs and innovations that place a halt on environmental security.

Currently traditional farming and agricultural methods are still in use, as it is the most popular and commonly used method. Having it be the oldest way and technique to produce food, many are hesitant to try new methods of farming and go out of their traditional comfort zone. The question to ask is if this method is still sustainable to our growing modern world, or if some changes should be taken into consideration? Traditional farming offers the waste of crops to be used as fertilizers and also allows crops to have a stable and strong system to support their roots, with the help of soil. It is also great for the heavier vegetables such as corn, squash, and zucchini. Traditional Farming has been carried on for generations and has provided global progression throughout decades with trade, economy and much more!

While these numbers may seem shocking, by the year 2050 the earth is expected to hold up to 10 billion people. Although, it is also expected that by the year 2030 a food security crisis will already be a worldwide risen problem. And yet people seem to overlook the possible outcomes as to why this will happen. This threat to life on earth will be caused by diminishing arable land, water shortage, and population growth. The UN sent out a statement which concluded that 1.8 billion people will be living in countries or regions with absolute water scarcity by the year 2050. This cannot cross one's mind without some concern. Such high numbers are emerging and without a sudden call to action, our problems might be closer than we think.

Knowing that other techniques of crop production for the growing population is not being highly considered and used, despite all the problems arising in the world, is concerning. Traditional farming methods do have their pros and cons, but who ever said that those pros could not be found elsewhere? With the many concerns we already have with soil, water, and over population, continuing to grow our food from only the ground will increase and add troubles to our society. Making life on earth harder than it should be. There are more sustainable ways that can benefit both humans and the planet to grow fruit, vegetables, and herbs!

Aquaponics is an idea that has been carried on for centuries but has never been fully taken advantage of, until now! We might be asking ourselves what is this aquaponics thing and how can it last a chance to solve one, yet multiple things? Well aquaponics is a type of system that includes two types of components, aquaculture and hydroponics states. Aquaculture is better known as fish farming, while hydroponics is growing plants in water, and when these two ideas combine they create magic.

Aquaponics uses aquatic animals such as fish, shrimp, snails, sometimes even clams and a mix of these sea creatures to create ammonia. The ammonia then gets converted into nitrite, and then nitrate, which provides nutrients for the plants. Aquaponics is one big consistent recycling cycle which allows all the components and everything in it to thrive. If something is not being used for energy and food like the fish and the crops, then it is being recycled and that is why it is so great and sustainable.

Additionally, using aquaponics will not add any issues to the soil crisis as no soil is used! Water will also not be a major concern as 90 percent of the water in the system is conserved and reused. No added fertilizers and pesticides are needed which keeps the system clean, natural, organic, and chemical free. It can also be made from reused and recycled materials or for little to no money which keeps this method of farming eco-friendly and reasonable. And last but certainly not least it can be used and grown anywhere!

Possibilities are endless due to the fact that aquaponics can be kept in a home, outside in the garden, on a roof or anywhere your heart desires, and it will still work! Plus to keep things interesting, there are three different types of techniques which can be used depending on what you choose to grow.

We as humans need to take advantage of our resources and find a way to have the same growth success from traditional agriculture while using the least amount of materials possible and still be classified as eco-friendly. This does not mean that aquaponics is the answer to ALL of our problems and concerns, but potentially could be a great alternative to traditional farming. This also does not mean that traditional agricultural and farming methods need to completely disappear. It just means that more collaboration, education, time and energy needs to be dedicated towards other more sustainable farming methods. We need to work together and combine ideas to find a realistic happy medium that will satisfy everyone and everything on planet earth.

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