

Aquaponics awareness is growing exponentially as it's an Agri-Tech concept that is quickly moving into the mass consciousness. In some ways, Aquaponics is to traditional agriculture what television is to the radio or what the computer is to the typewriter—DISRUPTIVE! Because Aquaponics is causing a revolution in food growing and it is *the most important food-growing technology on and off our planet to date.* 

Aquaponics is a cross-linked ecosystem that grows both fish and vegetables. Through a process called nitrification, the fish waste is transformed into nutrient rich water to feed the plants. The plants absorb these nutrients and return the cleaned water to the fish. This is done in a multi-pass recirculating system known as Aquaponics. This natural process makes aquaponics systems the most efficient, resource conserving food growing technology known today because they **grow two crops (fish and vegetables) using 90% less water than conventional farming.** 

Aquaponics USA utilizes the best of aquaponics food growing technology in their STEM & Family Food Growing Systems designed for small-scale food growing. These systems rapidly and effectively produce vegetables and food fish. They are ecologically sustainable and free of negative environmental influences. They, therefore, relieve the aquaponics gardner from soil-born diseases, most pests, weeds, chemicals like herbicides and pesticides and, of course, when the farmer uses organic or non GMO seeds, they are free of GMO's.

We live in strange and challenging times; and Aquaponics is the answer to the three most important drivers for change in how we grow, distribute and think about food:

## The Worldwide Food, Water and Fish Crisis:

**FOOD CRISIS:** In a <u>CNBC on-line article</u> we see that in April of 2020, during the beginning of the Covid scare, "the U.S. Labor Dept reported that prices U.S. consumers paid for groceries jumped 2.6%, the largest one-month pop since February 1974. The price of the meats, poultry, fish and eggs category rose 4.3%, fruits and vegetables climbed 1.5%, and cereals and bakery products advanced 2.9%." And things haven't changed since then. The <u>2020 Global Report On Food Crisis</u>, states that "The number of people battling acute hunger and suffering from malnutrition is on the rise yet again. In many places, we still lack the ability to collect reliable and timely data to truly know the magnitude and severity of food crises gripping vulnerable populations. And the upheaval that has been set in motion by the COVID-19 pandemic may push even more families and communities into deeper distress." We all saw shelves empty while shocked Americans prepared to Self Quarantine when the fear of Covid gripped our Nation and the World.

In the <u>May 2014 issue of Nat Geo</u>, Jonathan Foley, A University of Minnesota researcher, outlines a 5-step framework for feeding 9 billion people by mid century opening an 8 month series on the future of food. Here's another shocking statistic regarding the debilitated condition of our world's soil: "An estimated 75 billion tons of soil is lost annually with more than 80 % of the world's farming land 'moderately or severely eroded." worldpreservation foundation.org)

WATER CRISIS: Californians know full well what it meant to be in a devastating Drought. The U.S. Drought Monitor Map at <a href="http://droughtmonitor.unl.edu/mapsanddata/maparchive.aspx">http://droughtmonitor.unl.edu/mapsanddata/maparchive.aspx</a> painted a frightening picture. The CA water situation reached critical proportions leading to fines of up to \$500 per day for using water recklessly. Reuters did a review of a documentary called "Last Call at the Oasis" starring Jack Black and environmental activist Erin Brockovich who ask you to think again if you thought only 3rd World Countries have water crises. In this eye-opening documentary you learn that: "A third of U.S. counties face water shortage by the year 2050." Water conservation is the great gift of Aquaponics because aquaponic food growing uses 90% less water than traditional tillage farming. This is the answer to the World's Water Crisis.

**FISH CRISIS:** One of the heroes of the ocean dwellers, Charles Clover, wrote a book called <u>"The End of the Line: How Overfishing Is Changing the World and What We Eat"</u>. In February of 2010, the DVD which was two years in the making, was completed. It is a must see. The National Geographic recently published an article entitled <u>"Still Water: The Global Fish Crisis"</u>. The author, Fen Montaigne, says this: "The world's oceans are a shadow of what they once were. Some argue that stocks of many large oceangoing fish have fallen by 80 to 90 percent, while others say the declines have been less steep. But all agree that, in most places, too many boats are chasing too few fish." And these warnings came before the BP Oil Spill and the Fukushima Nuclear Disaster. **Aquaponics USA** solution to these present and future scarcity challenges. Grow Food Locally in Homes & Schools. Turn America back to the Agri-Society it was when every home had a garden.