

How Can Farming Restore Human and Ecological Health?

Humans have always changed the world around us, from the beginning of time. We have sculpted the land to provide for us, gently cultivated the fertile earth to grow, delicate green stalks rising and surging up to become our lifeline.

But not all we have done has been in harmony with our world. We have made mistakes, and now we are trying to repair the damage we have wrought. But the question is how? How do we fix this without causing further harm? The answer is to do what we did in the beginning, what is the most natural thing to do, and what the earth did without our help. The answer is to grow. Farming is what will restore our earth to health.

Global warming has been a long time debate and concern in our society. It's agreed that yes, global warming is happening. Humans and other sources are releasing carbon dioxide into our atmosphere, destroying the thin layer of gas around our planet that makes life sustainable. But how quickly? How much time do we have before catastrophe hits?

Studies show that the average temperatures around the world have risen 1.4 degrees Fahrenheit (0.8 degree Celsius) since the 1880s. This may not sound like much, but the rate of warming is increasing. The 20th century's last two decades have been the hottest in 400 years, especially in areas like Alaska, where temperatures have risen at twice the global average. (National Geographic News) This suggests a very unpleasant future for Earth if something is not done about this problem.

Annually, 33 million acres of forestland are cut down worldwide. If such losses were cut in half, it could save 500 million metric tons of carbon annually, reducing global warming by twelve percent. Forest depletion ultimately contributes more GHG emissions than all the cars and trucks in use worldwide, says Werner Kurz, a forest ecologist with Natural Resources Canada. "What we are doing in these tropical forests is really a massive problem." (Scientific American)

Changes in forest management and agricultural practices could significantly reduce the threat of global warming much more quickly than can technological solutions such as carbon capture and storage (CCS) from coal-fired power plants, according to experts. "We don't know how to do CCS. These are things we could do today," says Bruce McCarl, an agricultural economist at Texas A&M University in College Station. (Scientific American)

One suggested solution: more widespread adoption of no-till farming, a practice that involves leaving unharvested crop stalks and other plant matter behind in the field undisturbed. "Anything that reduces soil disturbance increases carbon storage," McCarl notes. Basically, the carbon stored inside the remains sinks into the soil instead of being stirred up and into the atmosphere when the soil is prepared for planting. Such no-till farming results in improved soils and reduced fuel use, because there is no need to harvest the stalks with tractors and other equipment (although it can lead to short-term reductions in crop yields). (Scientific American)

Another way to reduce global warming is to find an eco-friendly substitute for the gasoline we use daily. Scientists are searching for ways to replace it using natural substances such as corn. This would not pollute our air or destroy the ozone layer; however, it would require massive amounts of corn.

Experts agree that farming will restore the health to our soil, but they also agree organic farming will do even more. Rodale Institute has been researching the benefits of organic farming. From the Register op-ed: “When the soil is nurtured through organic methods it allows plants to naturally pull so much carbon dioxide from the air and store it in the soil that global warming can actually be reversed. Farms using conventional, chemical fertilizer release soil carbon into the atmosphere. Switching to organic methods turns a major global warming contributor into the single largest remedy of the climate crisis while eliminating toxic farm chemical drainage into our streams, rivers and aquifers.” (Rodale Institute)

In the first of two research reviews issued during the year, the Institute stated: “Agriculture is an undervalued and underestimated climate change tool that could be one of the most powerful strategies in the fight against global warming. Nearly 30 years of Rodale Institute soil carbon data show conclusively that improved global terrestrial stewardship--specifically including regenerative organic agricultural practices--can be the most effective currently available strategy for mitigating CO2 emissions.” (Rodale Institute)

It is also hoped that with the proper techniques, farmers could find a way to produce more crops faster and more efficiently than ever to reduce world hunger. In the second research review, the Institute leaders used their compelling evidence as proof that we could “feed the world and must restore ecological health to our planet. To do this we need to launch an Organic Green Revolution – that fundamentally changes the way we grow our food to maximize yield while mitigating climate change, restoring clean water, building soils, and protecting agricultural production during times of drought.” (Rodale Institute)

Obesity is also a huge concern in our world today. One in three or 58 million American adults aged 20 through 74 are overweight. According to data from the Third National Health and Nutrition Examination Survey (NHANES III), the number of overweight Americans increased from 25 to 33 percent between 1980 and 1991. Furthermore, one in five children ages 6 to 17 is overweight. Eleven percent of children and adolescents are overweight, up approximately five percent from the 1970s. The annual number of deaths attributable to poor diet and inactivity: about 300,000 deaths. The numbers are staggering. (Obesity Facts)

Obesity is a known risk factor for diabetes, heart disease, high blood pressure, gallbladder disease, arthritis, breathing problems, and some forms of cancer. Even more troubling is the fact that the percentage of obese people in America is rising every year. If we could develop healthier foods to help prevent obesity, not only would we be stopping obesity, we would be preventing a number of other deadly health issues. We could save millions of people from being affected by these afflictions. This would also save money for anyone trying to pay medical bills for illnesses caused by obesity.

One of the main causes of obesity is overeating unhealthy foods. In our world today, advertisements for fast food restaurants and sugary snacks are everywhere. As a result, it is becoming increasingly difficult to make the right choice about what we eat and how much we need. Often, we don't realize how many carbohydrates are in our food. Nutrition labels are difficult to read and advertisements can be misleading. Is it any wonder that we are having such issues with obesity considering what we are exposed to on a daily basis?

In order to stop obesity from becoming an even bigger issue, many farmers are trying to grow healthier foods. They are trying to create their products with as little sugar and fat as

possible. Farmer's Markets are becoming more popular as farmers add more variety to their assortments of produce. Schools are making more of an effort to put healthier foods on their menus, such as fruits and vegetables instead of the never-ending stream of fatty snacks. Schools are also trying to better educate children on their food choices. Some programs are attempting to teach children how to grow their own fruits and vegetables, hoping that this will spur them into continuing to grow and eat their own produce.

Farming is also an excellent way to increase work ethic and responsibility in kids. It is beneficial for youths around the world to learn skills that will help them succeed later in life, and farming requires many such skills. Responsibility, dedication, physical labor, and knowledge are all benefits of farming. Adolescents have the opportunity to pursue a career in farming, and if they decide that farming is not in their future, they still come away with experience and knowledge that could later be used in another line of work.

How can farming restore human and ecological health? A more fitting question, perhaps, would be how can it not? Farming has always been beneficial. It has always been a part of our lives, something we depend on to survive. It is a part of nature. The world heals itself by growing. It is the staple of life, the necessary yet fragile bond still tying us to Earth. If we did not farm, we could not live. Farming enables us not only to survive, but to thrive on our planet. Everywhere we turn, life is flowing around us, from deep in the rich soil to high in the green fingertips of the trees. We cannot deny that farming is the core of our world, the key to our very existence. It is our lifeblood, the marrow of the Earth, the heart of the land. It is as vital as the air we breathe. Farming not only restores human and ecological health. It is all that keeps human and ecological health.

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