

CORONAVIRUS & INDOOR VERTICAL FARMING

WE ARE MORE THAN JUST FARMERS; WE ARE PRODUCERS OF HEALTH AND SUSTAINABILITY

We at Urban Health Farms could not have imagined how relevant our corporate slogan would become on such short notice. With the world singularly focused on COVID-19, and new information on the far-reaching effects of the pandemic being published every day, we wanted to reach out and let you know that here at Urban Health Farms, we are taking the health of our global community very seriously. Right now - with at the date of publication of this newsletter approximately 250,000 confirmed cases - people around the world are struggling to survive, to eat, to protect their families and continue to make ends meet when so many industries have been negatively affected.

But there are a multitude of things we can and must learn from the current crisis. In times like this, when borders are closed and communities are insecure, it seems like the time is ripe to look around, see what's missing and put the right solutions in motion.



Geert Noels, one of Belgium's most renowned economists, wrote on his professional blog (Diary Team Econopolis 19 March 2020) that the Corona crisis has shown us the fragility and economic contagion of current globalisation. In addition to Brexit and Trump's trade war, this is the third push towards more deglobalisation and more localism. Supply chains and local production will be reviewed, and the climate could be a winner due to awareness of deglobalisation and the impact of air pollution on lung diseases, for example. Mr. Noels states that we currently pay too little for the climate impact of the global production chain and that we are also now noticing that we no longer have essential supplies, and sufficient local services and production. Local production might cost more but will also be more environmentally / climate-friendly and bring many social benefits.

WHY SUSTAINABLE INVESTING IS MORE IMPORTANT THAN EVER

With stock markets across the globe experiencing the largest losses in the shortest period of time due to the coronavirus, some are asking, "is this the end of Capitalism in its present form"? Equally, some fear that ESG and Impact Investing (Sustainable Investing) will fall out of favour during this period of hunkering down. But now more than ever, creating an economy based upon well-being is absolutely critical. Investing in companies that integrate social and environmental risks and work for stakeholders, and not just short-term investors, will prosper. We need a society that is resilient and provides a support mechanism for the entire population. This will allow economies to weather these storms and prevent outbreaks of pandemics and societal collapse. Sustainable investing instills passion and excitement. It seems only true ESG and Impact Investors currently understand the big picture and the need to look at all risks and returns. However, this group will only grow. Let's face it - a society where businesses' main focus is profit maximisation at the costs of society, is a strategy doomed to fail.

Source: Billionaire, 17 March 2020

URBAN HEALTH FARMS CONTINUED COMMITMENT TO HEALTH & SUSTAINABILITY

CONTROLLED ENVIRONMENT AGRICULTURE AND INDOOR VERTICAL FARMING

Experts across industries have been talking about a potential food crisis looming on the horizon for some time. But when the Coronavirus started sweeping the world, that horizon suddenly became a lot closer. We can now see how communities react when global economies are frozen, when import and export are delayed or suspended altogether, when supplies are short, and when people's health is at risk. At Urban Health Farms, our vision is to take controlled environment agriculture - a proven concept - and scale it to create a global network of safe and healthy indoor vertical farms that will nourish the Earth's population, whether in times of crises or not. Through our ultra-advanced quality control, we can offer our products as an answer to both health and sustainability across the board: employee health, nutritional robustness, economic health, environmental protection and a complete elimination from contamination during the growing, packaging and distribution chain. With the strict quality control measures implemented in indoor vertical farming, we can create a new generation of intelligent farming, effectively delivering the highest quality of produce available in the market today.

We find it hard not to think about how this crisis perhaps would have been less fearful or less impactful if urban communities around the world had access to a steady and uninterrupted supply of locally produced fresh, healthy food. In truth, the Coronavirus has only motivated us to accelerate our investment into the European rollout of our indoor vertical farms and local food production. Should a crisis like this ever happen again, communities with indoor vertical farms will continuously have access to fresh, healthy produce. In this way, indoor vertical farming fits within the preventative measures we must implement for a healthy, secure future.

Advantages

The benefits of vertical farming can be categorised and summarised in terms of economic, environment, health, social and political dimensions.

Economic advantages

The economic advantages of vertical farming are numerous and include less economic risks of harvests getting lost due to the protection from floods, droughts and sun damage. There are essentially no requirements for fertilisers, herbicides, or pesticides. No soil is needed if hydroponics is used; only nutrients and a water supply. There is no requirement for long-distance transportation due to localised production and no need for farm machinery such as tractors, trucks, or harvesters. An indoor vertical farm can yield 30 times the produce for the same square meterage as with traditional farming and there are no seasonality issues because continuous crop production occurs all-year round and can be programmed to match demand.



Environmental advantages

The environmental benefits are significant, including providing healthy natural food not contaminated from chemicals. There is greatly reduced use of fossil fuels by minimising farm to consumer distance (less food miles = less CO2 footprint). Burning fossil fuels can be further minimised by employing solar panels, roof-top wind turbines, and storage batteries. This will lead to a reduction in ecosystem-carbon levels. Indoor farms use 95% less water, and the water that is necessary can in many cases be captured from rainwater. There is zero agricultural runoff and in addition the potential to rejuvenate the national ecosystem so that rural land is reclaimed for natural vegetation. Most importantly, vertical farming supports environmental sustainability.

Health advantages

In an indoor vertical farm, the produce is grown without any pesticides and heavy metals and the nutritional value is higher. The produce can last twice as long (longer shelf life) and retains more of its nutrients for the consumer. Our farms will provide fresh, nutritious, accessible and local produce year-round.

For more health benefits, we refer to the section "Introduction of Dr. Khalid Salim" on the next page.

Social advantages

Vertical farming supports local economies and will provide new jobs in engineering, biochemistry, biotechnology, construction, maintenance, and research and development opportunities for improving the technology. Enhanced productivity can lead to lower food and energy costs and improve incomes. It also integrates smoothly with local communities using low value land and providing maximum positive social impacts.

Political advantages

A key political advantage of vertical farms is that climate change commitments are more easily satisfied, and the technology supports adaptation and mitigation. The closed-system approach supports biosecurity because of greater protection from invasive pest species. The corona crisis has taught us that economies and communities are vulnerable and that deglobalisation and the review of supply chains and local production are an absolute necessity in today's world.



Introduction of Dr. Khalid Salim

Urban Health Farms' newest Advisory Board member

When health is the number one priority, controlled environment agriculture can bring us food security and safety that importing produce never will. With that in mind, we would like to take this opportunity to introduce our newest Advisory Board member, Dr. Khalid Salim, a licensed medical doctor with years of experience focused on understanding how science and medicine can positively impact our health. With this expertise, Dr. Salim will fulfil a key role in our commitment to health. We asked Dr. Salim how he thinks that indoor vertical farming can benefit health.

Dr. Salim, you've said now is the right time to begin a new era of controlled environment agriculture. Why now?

From a medical perspective there are many reasons why there needs to be a new way for cultivating crops and vegetables. Cancers, cardiovascular, autoimmune disease, as well as allergies in the population are increasingly prevalent in our modern society. Multifactorial causes may make it difficult to pinpoint to one particular cause. However, the complexity of the causes for disease should not prevent us from using common sense and medical evidence when evaluating current threats to our health by these "toxic" crops of the old way of farming.

What about the "old way" of farming is harmful to modern health?

Prevalent use of glyphosate (like Roundup ®) in agriculture can be used as a perfect example of a chemical substance that is currently widely utilised in agriculture. Glyphosate was previously developed as an antibiotic and is now widely used in farming as an herbicide. As a medical doctor, the recurrent ingestion of an antibiotic, even in lower doses, certainly does not sound like a good idea for continuous

human consumption. Chemical substances such as glyphosate could alter the intestinal microbiome, leading to a leaky-gut-syndrome with all kinds of health problems of our "modern civilisation" that is caused by chronic low-levels of inflammation in the body, including cancer.

You've also expressed worries over how modern agriculture has left us with a lack of nutrients. How can a change in agricultural methods change how our health is impacted?

Depletion of our soil by over-farming leaves us with very few nutrients. Less nutritional values in vegetables are evident everywhere, including, for example essential micronutrients such as Selenium. A substantial deficiency of Selenium can be the cause of many chronic diseases, including a weakened immune system and infertility.

I am convinced that modern agriculture, such as indoor vertical farming, will be able to provide us with the crops in a toxic free and nutrient rich way, while ensuring to supply the increasing demand of the population with food. May this change come sooner rather than later, as we all like to live a long and healthy life.

