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Over the last few years, we have witnessed a steady rise in demand for locally sourced food. Markets are carrying more local options, restaurants are growing their own food, even cocktails have "craft, local ingredients" stirred in them. What's driving this trend? It seems that our palates have been changing, together with our priorities.

Our gaze is shifting inwards toward our own health, and outwards toward a much larger picture: the health of our planet. It's also likely that the longer cities remain in quarantine, with mobility curtailed, the more important the health of local communities could be to the people who live in them.

Our focus has been changing in part because the past few years have begun to show glimpses of weak links in our food supply chain. The increasing frequency of foodborne illness outbreaks shed light on how important the source of our food actually is.

As a result, local food slowly became king—consumers were shown that the farther food travels, the more likely it is to be exposed to health and safety risks. Growing awareness and activism around environmental protection also made us begin to second guess our regular purchases. Consumers are learning that food from across the world comes at a cost beyond the extra dollars paid for imported goods.

The emissions that result from transporting food long distances are immense, and have been heating up the planet while we have been dining on international cuisines. With 11% of agricultural emissions attributed to transportation alone, sourcing local cuts this down significantly, and many are realizing that food choices actually bear weight.

While these health and environmental benefits have spotlighted local food, studies have shown that it also has economically robust advantages. According to an article by Sustain Ontario, the community economics of buying local proves that "the more a dollar circulates in a defined region, and the faster it circulates, the more income, wealth and jobs it creates."

In fact, local food has a multiplier of 1.4x to 2.6x, enhancing the vibrancy of communities at a significant rate. The most prosperous communities gain and sustain their wealth because they have the highest percentage of jobs in locally-owned businesses.

This doesn't mean that they are entirely disconnected from the global trade economy; it means that they only import things that they can't supply themselves. When production is localized, more jobs need to be done, and seasonal unemployment is diminished—an issue that has become extremely relevant in current times.

All of these benefits have driven the rising interest in local food over the last few years, but ultimately, COVID-19 has made the weaknesses of our globalized food supply chain difficult to ignore. As cities shut down and businesses are left without their usual customers, the fragility of our food supply chain has come to a head, making local food more of a necessity than a luxury.

The number of hands it takes to pass along food from a farm in New Zealand to a plate in the United States is inordinate, and leaves a lot of room for error and risk that we can no longer afford. The length of current supply chains, not to mention the complexity of the entire food system, is resulting in both shortages and surpluses that call the 'efficiencies' we once relied on into serious question.

As the move to shorten supply chains gains traction, we have also begun to notice that urban farms, community-supported agriculture (CSA), and controlled environment agriculture (CEA) have played a large role in keeping food supplies flowing during the pandemic.

Yet, while their adaptability has recently been lauded, they have always had a role in the local food economy. In fact, last year, Agritecture and Autogrow conducted the 1st Annual Global CEA Census, and found that the trend towards local food was supported by the number of urban and indoor farms that satiated this demand.

Data from over 300 farm operators across more than 50 countries showed that 50% were located within 10 miles of primary customers. Indeed, one of the largest value propositions of indoor farming is that food can be grown in places that cannot naturally accommodate agriculture, but where most people have chosen to settle. Through CEA, communities gain access to local food that would not have been available without the technology.

The case is made stronger because while consumer preferences lean towards local, the demand for international flavors remains high. According to the National Restaurant Association's 2019 Culinary Forecast, some of the top trends include globally inspired breakfast dishes and global flavors in kids' meals.

Our highly globalized economy has given us a taste of dishes from across the world, and it

seems that many still crave the international flavors despite opting out of international sourcing. This is the additional value provided by indoor farms—controlled environments can house plants that are not native to an area, without compromising the balance of natural ecosystems or soil health.

Furthermore, indoor farms can grow crops year-round, which gives them the ability to fulfill consumer demands without the challenge of seasonality. In fact, the 2019 Global CEA Census showed that 94.42% of farms surveyed operate over all 12 months of the year.

In the face of a global pandemic and a rapidly changing climate that has made predictability extra challenging, growing food indoors—almost anywhere, at any time—could mitigate some of the risk associated with unforeseeable consequences.

The question we ask now is: is the primary role of indoor and urban farms within local markets? We think yes, not only because of the shifts in demand towards local food, and all the benefits listed above, but also because of the already high resources required to run these types of farms.

One of the biggest drivers of the environmental impact of CEA operations, especially vertical farms, is energy. Without a completely renewable grid, the impact is still significant, and adding emissions from transportation grows this impact unnecessarily.

Additionally, when indoor farms begin to defy local community boundaries, the risk of taking business away from small-scale farmers that are still growing crops in environmentally sound ways becomes greater.

Inasmuch as we believe that indoor farming has a place in the local food economy, we also believe in the importance of balancing high-tech and traditional methods in our food and agricultural systems. Knowing where indoor farming provides the most value is key to determining its place.

With COVID-19 sweeping the globe, and heavily impacting both traditional agriculture and controlled environment agriculture, the **2nd Annual Global CEA Census** aims to shed light on how CEA farms are affected and continue to adapt. Are indoor and urban farms still likely to serve local communities?

Has the need become greater in this global pandemic? Or is the path to elevated impact through expanding customer range, to fulfill demand in other areas of the world?

If you're a CEA operator, we want to hear your story. Be a part of the 2020 Global CEA Census and let us know how COVID-19 has impacted your business. The report on all data collected in the Census will be made available, free of charge, later this year.