

Modern Farming: How Climate and Technology are Impacting the Future of Agriculture

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From the 17th century through modern day, the world has plunged head-first into the era of technological development and its companion, capitalism. For the last 300 years we have scaled and progressed continuously in our quest for innovation and power. At every discovery, technology has stood in lock-step with us, acting as our platform upon which we were able to continuously climb the ladder as the most dominant and intelligent species our planet has to offer. But we have done so recklessly. We don't often enough ask ourselves, as a species, if we are behaving in a way that will preserve the conditions in which humanity can continue to exist. Because we haven't been emphasizing

this concept, humanity has for decades now treated this world as its eternal supplier of life, and all things we could ever consume.

It seems, though, that even mother Earth has her limits. The global temperature is increasing year-over-year, sea levels are rising, and polar ice has reached record lows. These concerns are alarming in their own right, but when considered as part of a larger perspective, we realize that our planet's system is balanced in a way that has allowed life to exist for a long time. It exists in a symbiotic state of a network of processes and mechanisms that make our planet *work*. But when an element of such a system (that is we) begins to erode the foundation upon which such a massively complex system sits, we will find that it might not take long for the system to begin to lose integrity. More worrisome still, we don't know very well how quickly such a super-system might collapse. It could take centuries, perhaps. Or a few decades. Or 4 years. We cannot predict the ultimate failure points.

There is, however, technology. The same human-ness that got us into such existential circumstances is the same mechanism by which we can avoid a premature demise. In the coming years and decades, humanity will be forced to quickly invest in global operations to mitigate the natural effects of climate change. These endeavors will likely involve extensive research in fields like Artificial Intelligence, quantum mechanics, energy production and distribution, and food production.