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One Potato at a Time

An imagined future of fully autonomous farming raises a choice about ownership, basic access and room for new farms, shops and inventions.

2026.11.08 17:20 DENNIS HEDEGREEN OPEN V1.0
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Imagine I own a field.

I buy the machinery that lets me grow more potatoes with fewer paid hours. Then follow that development all the way through the thought experiment. Planting, monitoring, harvesting and maintaining the farm become autonomous. The same becomes possible across agriculture. No farmer's labour is required to keep the food growing.

The machines still need land, energy, materials and a functioning supply system. But the owner no longer needs to employ people to operate the farm. People still need food, and ownership still determines who controls the harvest.

What should fully automated agriculture make possible for people who do not own it?

In my Saved Hours work (https://hedegreenresearch.com/articles/the-saved-hours-doctrine/), I ask who receives the benefit when technology makes human labour unnecessary for a task. More food, lower prices, profit, shorter working time and shared provision are different possible uses of that gain. The machine does not choose between them.

Before asking how to distribute the first potatoes, I want to ask what kind of society we would like the machines to help us build. A first working provision would give us somewhere concrete to begin.

When one player owns the board

Now add a second assumption: ownership also becomes more concentrated. Push that to its extreme and imagine a game of Monopoly, or Matador, in which one player has ended up owning every property. The game can finish there. A society cannot. People still have to eat after someone has won.

In that imagined future, the productive system could keep running without needing the labour of the people who depend on its output. They might earn money elsewhere, but their access to food would still run through payment to whoever controlled the supply. Solving production would not, by itself, settle access.

That is one possible arrangement, not a destiny contained inside automation. Another could redistribute income while leaving productive ownership concentrated. People could receive purchasing power and continue buying what they need. A third could guarantee a defined material provision alongside incomes and markets. These choices could also be combined; the same machines do not require the same institutions.

The destination I want to investigate through Human Baseline (https://hedegreenresearch.com/articles/why-should-anyone-go-hungry/) is dependable access to the essentials, so that a person does not have to win the ownership game to remain alive. Food would be one layer, with housing, water, energy and transport requiring their own systems. The point of beginning with food is to make one part of that ambition concrete.

More room to invent

I would like that secure floor to make the world above it more varied. There could be a hundred different potato businesses: shops selling unusual varieties, small farms trying different crops or growing methods, kitchens making things I would never have thought of. A dependable basic provision would not exhaust what people might want from a potato.

The diversity maintained by Andean farming communities (https://cipotato.org/potato/native-potato-varieties/) is a reminder of how much people have already made of it. Varieties have been selected over centuries for different tastes, textures and growing conditions, and that diversity remains part of living farming communities. I do not think we have finished discovering what we can grow, cook, preserve or enjoy.

Someone might want to start a potato shop because they have a ridiculous idea that turns out to be good. Someone else might want to establish a new farm, automate it differently, grow something unusual or do some of the work by hand because they enjoy it. Making farm labour unnecessary would not require forbidding people to farm.

Those businesses would still need customers, equipment, skills and money. My hope is that fewer people would have to weigh every experiment against the possibility of going hungry if it failed. A food floor could remove one part of that fear while leaving room to earn money, compete, make better things and discover new preferences.

I want the security underneath the market to give more people a chance to enter it. The machines could relieve necessary work without closing the future to everyone who did not already own them.

Start with a potato

That imagined destination does not require a fully automated farm before we begin. A first service could work with today's growers, workers and equipment. Suppose the European Union began a shared food programme with one ordinary crop: potatoes available without payment at collection to everyone in the first area connected to it.

Everyone means everyone in the covered area, without proving poverty, buying membership or receiving a personal potato quota. Nobody would have to collect what they did not want. Private growers, cooperatives and public institutions could take different roles; the obligation would be to maintain enough supply for the people the service covers. How to meet changing demand, handle shortages and limit waste without tracking each person's collections would have to be worked out in practice.

Calling the first crop a first crop is not a weakness. Calling it a complete food system would be.

The population tool (https://hedegreenresearch.com/articles/human-baseline-starts-with-the-population/) and the potato calculation (https://hedegreenresearch.com/articles/papas-got-a-brand-new-bag/) help give food questions a physical scale. For a capacity illustration, assume demand across a service area of 10,000 people averages one kilogram per person each week for 52 weeks. That gives 520 tonnes collected over the planning year. The kilogram is an assumed area-wide average, not a personal limit, a nutritional target or measured demand. Production and purchasing would also have to allow for losses before collection and any planned reserve.

Someone still has to pay for produce, equipment, workers, storage, distribution and upkeep. Moving payment away from collection does not remove those costs. Automation might change them later, but a first provision has to be funded and maintained with the capabilities it actually has.

A harvest is not a supply

Food has to arrive when people need it. Fresh produce should reach people fresh. Suitable surplus could be preserved using safe, food-specific processes, with part of the supply becoming a rotating emergency reserve: checked, used and replenished rather than stored once and forgotten.

A family struggling to buy food may need money more urgently than a new distribution system. Cash assistance (https://civil-protection-humanitarian-aid.ec.europa.eu/what/humanitarian-aid/cash-transfers_en) can preserve choice where food is available to buy. I would not replace income support with a bag of potatoes. A shared service would take responsibility for maintaining a physical food supply and preparing for interruptions to ordinary provision.

It would have to earn that description. We should be able to see what was delivered, what was lost, what failed, how supply was restored and what it all cost. The service should be compared with cash support and other ways of securing access. The floor cannot depend on pretending that public institutions never fail.

A European beginning, not a European limit

When I was a child, I heard that the Danish model was something we should export to the world. I liked the ambition. What stayed with me was the desire for something more concrete than an example to admire: a manual someone else could use to build a working part of a better society.

Ideally, Human Baseline would be a world project from the first day. I would begin with EU coordination and local services. The EU's stockpiling strategy (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52025DC0528) already treats supply preparedness, stock rotation and cross-border coordination as shared concerns. I would like to build on that kind of cooperation to make an everyday basic food provision possible.

Each working part should leave the next community with usable designs, operating knowledge, honest costs and a way to join or build its own supply.

No baseline is complete while your neighbour still has none.

That does not require simultaneous global deployment. It makes expansion part of the purpose, eventually beyond the EU and adapted with the communities that would use it. Sending food during an emergency can be valuable. The longer-term ambition is to help people build their own dependable provision, rather than rely forever on someone else's surplus.

The habitat we could build

I grew up with Star Trek. I expected a food replicator before I expected to discuss the future with an artificial intelligence. We got the conversation first. While we wait for the replicator, we can choose what we want increasingly capable machines to make possible.

I would like a human habitat where basic security gives people more room to choose their work, start a business, grow something unusual or invent the next use for an ordinary potato. A future with less necessary labour could still contain plenty of activity worth doing.

Begin one useful provision, keep it running, record its failures and publish what the next place needs to know. The manual might start with an unremarkable sentence: *This is how we made sure everyone here could get potatoes.* I would like the next chapters to contain things we have not thought of yet.

Keeping that sentence true would take more than the first harvest. Someone has to finance the capacity, maintain it and keep access intact when an owner or operator changes. That is the next part of the question: could we leave the next generation a food system they can depend on, alongside the money with which to buy things?

One potato at a time.

— Dennis Hedegreen, still checking

RELATION MEMORY

CONTINUES Papa’s Got a Brand New Bag · Moves from food quantities and supply limits to the question of making a dependable first food service available.

RETURNS TO Why Should Anyone Go Hungry? · Returns to access, ownership and markets above survival; now develops an autonomous-agriculture endpoint and the hope of more varied enterprise above a secure floor.

NEARBY Human Baseline Starts with the Population · Population/energy scenario context; not evidence that the proposed crop supply has been delivered or is nutritionally complete.

SOURCE LAYER Where Did the Saved Hours Go? · Conceptual Saved Hours context: technically unnecessary labour does not determine who receives time or access; not a measured food-service result.

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