



**FH Salzburg**

# **Envisioning The Future**

**Domain: Food**

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Impacts of Future Technologies

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## Building upon the Analysis of the Now

Within the literature research preceding this work I have identified a number of possible signals, current trends as well as some weaker signals for possible futures in the domain of food. After the feedback I have received, I decided to focus on the sub-area of **Food Production**, more specifically the idea (and strong trend) of vertical farming ([1], [2]) and possibilities of going from global food logistics chains back to regional production. Issues I want to touch upon in my future scenario are: The growing food demand (especially food security [3]), the effects of food production and transportation on the climate and the societal effects of going back to regional production. As our upcoming panel round focusses on the city of the future in 2050 this also serves as a main focus for my fictional scenario (based on e.g. [4]).

## How food production could evolve

For my scenario I did not want to explicitly state what exactly happens but rather paint a picture of the news coverage and possible accompanying products that could evolve in my chosen domain. In order to do that my scenario starts in 2029 (Figure: 1), when the first production-grade vertical farming center in a city was created. As there already has been done a lot of research into this topic even in 2020 this exemplifies a rather strong trend into a propable or at least plausible [5] future not too distant from now. The scenario for this point in time strongly builds on technical advances already researched but not definitely production ready in our current time. Hints are given that the city of New York is planning to be completely self-sufficient by 2036. What I wanted to mention as well here is a possibility of a stark societal change because there will be no need for "outsourced" food production even for products that can only grow in a certain climate. Around the year 2045 these predictions kind of came true, but not without growing pains. Due to the fact that an irreversible change in climate happened in the 2030's (Figure: 3) and the move back to regional production shifted power away from globalized actors, conflicts are mentioned in the articles of the 2040s (Figure: 2). Hints to what has happened in the decade before can be found in the two articles presented. Finally for 2050 I wanted to go one step further and combine some weak signals I have found into a "magical personal greenhouse" (Figure: 4) that enables single households to live in a self-sufficient way. It runs on a cup of water a day and uses genetically enhanced seeds to ultimately be able to grow every possible edible plant imaginable. This points to a never-before seen democratization of food production, which ultimately could enable a shift in power to the individuals away from corporations as this device could empower individuals to be free from worries around one of the basic necessities of life. In contrast to that stands the fact that this personal greenhouse as of 2050 is a consumer product offered by a corporation that could allow for an even stronger corporate hold on existential products.

# The Fiction

I have attached the full-size assets in the assignment folder. Please take a look at them to be able to clearly see the small print and side stories as well.

## The beginning of production grade vertical farming, 2029



Figure 1: New York Times, 6th of December 2029 starring an article on vertical farming

## Effects of production grade vertical farming on food demand, 2040s

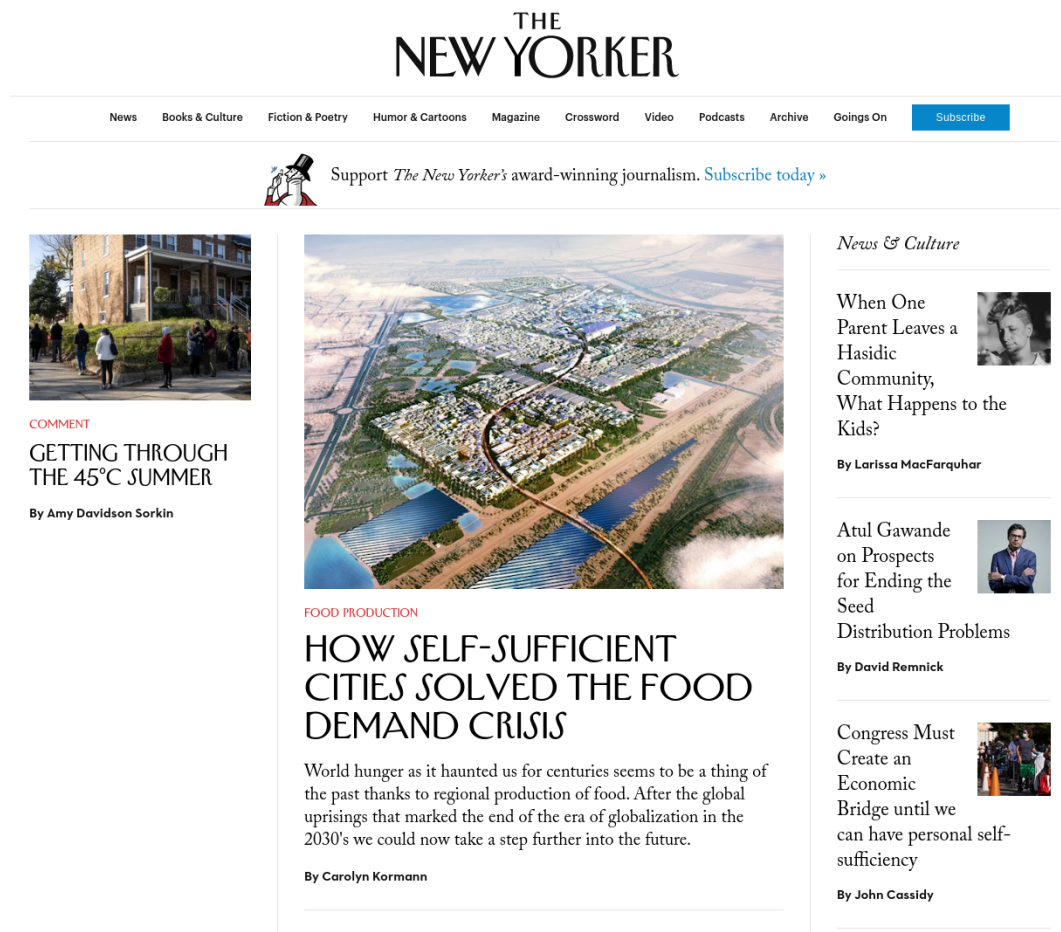


Figure 2: New Yorker, around 2043

## Effects of production grade vertical farming on the climate, 2040s

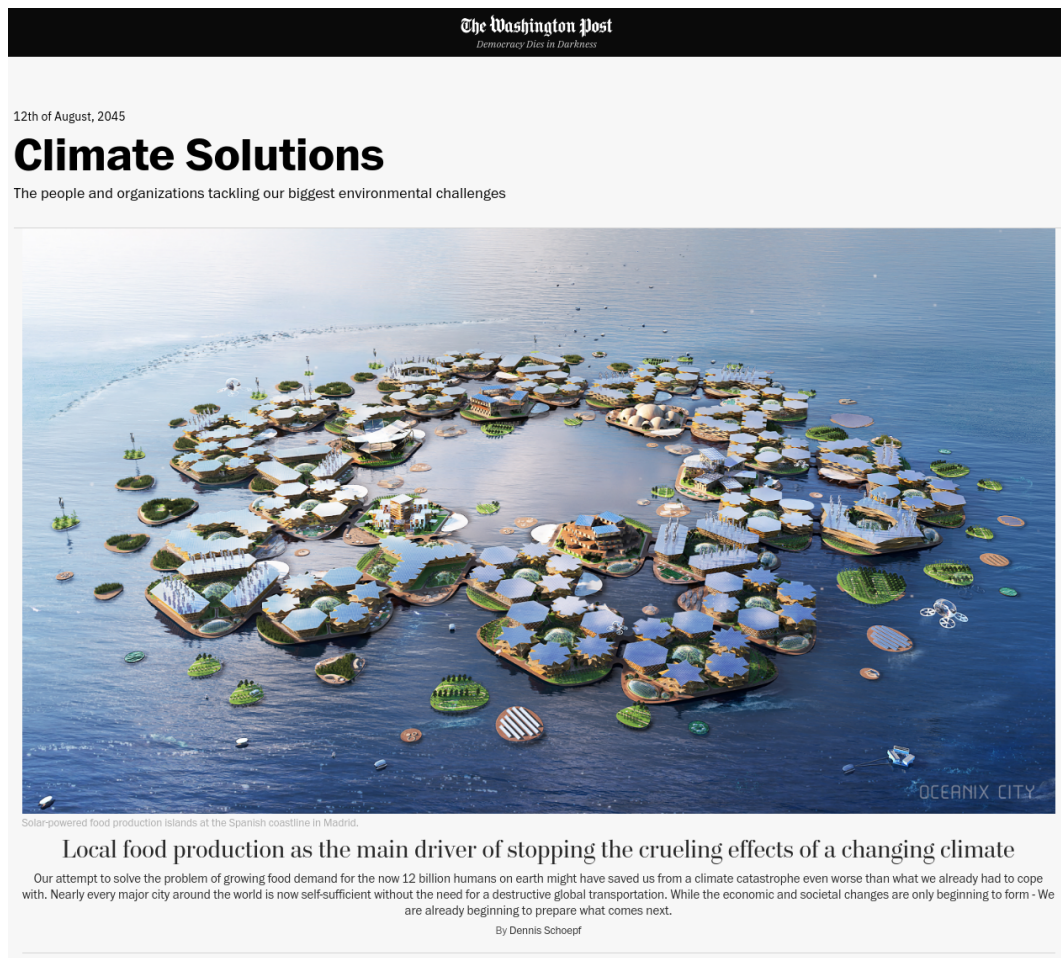


Figure 3: Washington Post, 12th of August, 2045

## Ad for personal green houses, 2050

**Your way into a self-sufficient life.**

Get your IndieNutrition® greenhouse today and start being independent from state vertical farms.

Grow everything you ever wanted: Potatoes next to bananas or your own coffee beans, everything is possible! Our patented microclimate zones make it possible.

*Our guarantee:* Feed a family of 4 with only a cup of water a day and our special seeds.

We offer a large variety of greenhouse sizes for single appartments and up to garden-sized personal greenhouses. Order yours today at [indienutrition.com/personal](https://indienutrition.com/personal)

Drone delivery and automatic setup in less than 6 hours. Additional fees may apply. Only works with patented IndieNutrition genetically enhanced seeds™.

The advertisement features a central illustration of a person standing next to a large, transparent, cylindrical greenhouse. Inside the greenhouse, there are stylized plants, including a large leafy plant and a smaller one. The background shows a city skyline with various buildings. The text is arranged in a clean, modern layout with a mix of bold and regular fonts. The color palette is primarily purple, blue, and green, with yellow highlights for the guarantee and growth sections.

Figure 4: IndieNutrition Ad for personal greenhouses, 2050

## References

- [1] “The future of food: Why farming is moving indoors.” <https://www.bbc.com/news/business-49052317>. Accessed: 4th of December, 2020.
- [2] K. Benke and B. Tomkins, “Future food-production systems: vertical farming and controlled-environment agriculture,” *Sustainability: Science, Practice and Policy*, vol. 13, no. 1, pp. 13–26, 2017.
- [3] P. Pinstруп-Andersen, “Food security: definition and measurement,” *Food security*, vol. 1, no. 1, pp. 5–7, 2009.
- [4] K. Specht, R. Siebert, I. Hartmann, U. B. Freisinger, M. Sawicka, A. Werner, S. Thomaier, D. Henckel, H. Walk, and A. Dierich, “Urban agriculture of the future: an overview of sustainability aspects of food production in and on buildings,” *Agriculture and human values*, vol. 31, no. 1, pp. 33–51, 2014.
- [5] A. Dunne and F. Raby, *Speculative everything: design, fiction, and social dreaming*. MIT press, 2013.