

Forum for the Future

**FORUM  
FOR THE  
FUTURE**

# Routes to Market: Scenarios to explore the future

September 2024

In partnership with:



John Ellerman  
Foundation

# Table of Contents

How to use scenarios	4
Macro trends shaping 2035	5
Summary of the three scenarios	7
Scenario 1: Sustainability Amplified	8
Scenario 2: Global Regeneration	14
Scenario 3: Homegrown	20
Growing our Future workshop outputs	26
Potential features of regenerative routes to market	30

*If we can't actually imagine a different future, then how, and why, would we create it in reality?*

Rob Hopkins

# Exploring the future: about the scenarios

These **2035 future scenarios** can be used to help interrogate what markets for regenerative products could look like in different future worlds.

- You can use the scenarios in a workshop setting, asking participants to imagine the future in each one and considering what their business would be doing differently and how the operating context in the scenario would be impacting them. Afterwards, consider your answers together asking - what kinds of things would you be doing in all scenarios and what risks and opportunities do the scenarios elicit?
- The scenarios are based on global trends and signals that we are seeing in the world today, and that could lead in different possible future directions as they play out and interact. These trends are summarised on the following two slides.
- The scenarios are not predictions, but are possible, plausible high level futures. They are not mutually exclusive – any mix of these could happen. The aim of exploring the scenarios is to consider the different elements that might play out in each one and identify associated risks and opportunities.
- The scenarios are designed as provocations and might feel uncomfortable. Not all aspects of these futures will feel desirable.
- All three scenarios hold the assumption that we have reached 1.5 degrees of global warming and are entering an unknown territory of climate crisis and ecosystem collapse.



# MACRO TRENDS FOR 2035

## ENVIRONMENT



Ecological and climate breakdown are fueling climatic volatility and biodiversity loss. Food production contributes to ecological breakdown

## PRODUCTIVITY



Crop yield reductions and failures: soil quality, impact of weather extremes on yields

## POPULATION GROWTH



Particularly in Asia and Africa, shifting regional demographics, urbanization, wealth and consumption patterns

## DIETS AND HEALTH



Accelerating diet-related public health and wellbeing crises - concurrent over-consumption and malnutrition

## GEOPOLITICAL INSTABILITY



Increasing political disruption and polarisation are driving supply and trade volatility, and protectionism

# MACRO TRENDS FOR 2035

## GROWING WEALTH AND CHOICE



In developing regions such as South East Asia, consumers are diversifying to choose more expensive products, from meat and dairy to healthier tailored products, more fruit and veg and the odd luxury.

## PERSISTENT AND RISING INEQUALITY



While some have more wealth and choice, others are scraping by, with very limited dietary options. They eat what they can afford and spend a significant % of their budget on food.

## FOOD INSECURITY INCREASING



Food insecurity is a major issue. People may need to rely on handouts and government programmes to get enough food.

## CONSUMER ATTENTION TO CLIMATE, PROVENANCE



Increasingly people are adding environmental, climate and social justice attributes to their priorities, driving demand for ethical and sustainable brands

## HEALTH AND WELLBEING



Attention to health impacts of food and the perceived as well as real healthy choices are driving demand for plant based and tailored nutrition.

# The three scenarios: summary



<b>Sustainability Amplified</b>	<b>Global Regeneration</b>	<b>Homegrown</b>
<p>Governments are focused on soil health and carbon to meet their Net Zero commitments.</p>	<p>Governments are going beyond Net Zero commitments; climate adaptation is high on government agendas, as are nature and biodiversity.</p>	<p>Due to supply chain fragility, countries have shifted production to more short, local supply chains, linking consumers more closely with producers.</p>
<p>New technologies are helping us to produce more food on the same amount of land while responding to the reduced nutritional value of products.</p>	<p>Diverse growing technologies have replaced the intensive farms of the past. Field production is an efficient, more nutrient-circular version of agriculture.</p>	<p>The retreat from unreliable global markets has forced the food industry to innovate to make up for missing products.</p>
<p>People are eating what they can afford and spend a significant % of their budget on food.</p>	<p>People have more varied diets; health and wellbeing are prioritised by governments with more stringent guidelines for advertising and production.</p>	<p>Digital and physical food hubs enable the aggregation and distribution of supplies from a large number of smaller food producers.</p>
<p>Consumers are paying more attention to climate and the environment.</p>	<p>Consumers are demanding more ethical and sustainable foods and companies are having to be much more transparent about where their products come from.</p>	<p>Consumers are adjusting to eating more local and seasonal foods, and feel that they're supporting their local communities and farmers.</p>



Growing our Future UK

Scenario One

# Sustainability Amplified





## Overview

---

As the global population reaches 9 billion, and the demographics of national populations shift, governments are prioritising food security and basic nutrition, ensuring that people are fed both within and across borders.

Citizens are pressuring governments to make stronger commitments to sustainability and are asking for businesses to step up their traceability and transparency commitments. Governments and businesses are innovating hard to meet these pressures while continuing to ensure economic growth.





## TRENDS SHAPING THIS FUTURE



- *ENVIRONMENT: ecological and climate breakdown is challenging business-as-usual food production*
- *POPULATION GROWTH: driving the need to feed more people with fewer resources*
- *INCREASING TRANSPARENCY: with innovations in traceability for food authenticity, provenance and safety, and waste reduction monitoring*
- *PERSISTENT AND RISING INEQUALITY: people are eating what they can afford and spend a significant proportion of their budget on food*
- *FOOD INSECURITY INCREASING in developed regions with a need to utilise all available food*
- *CONSUMER ATTENTION TO CLIMATE: People are adding environmental, climate and social justice attributes to their priorities, open to trying new things*

## What does production look like in this future?

- Global trade and the growth imperative continue to dominate food supply chains and their priorities.
- Governments are focused on soil health and carbon reduction, using ecosystem service models to meet their Net Zero commitments. New regulatory requirements force companies to measure and report extensively. Carbon markets are well developed.
- Companies are innovating hard to measure and report on their environmental footprints.
- New technologies such as precision fermentation are helping to produce more food on the same amount of land, while responding to the reduced nutritional value of food grown using traditional methods.





## What does consumption look like in this future?

- Consumers are keen to know where their food comes from, how it is produced, and the impacts it is having on people and the environment.
- However, the cost of living crisis has impacted the food choices people can make. Often calories are prioritised over nutrition and cheaper, imported options are chosen.
- Farmers are producing to feed people and are innovating new ways to measure and capture the data required of them by processors and retailers.
- Small food businesses and farms are either innovating new business models to reach consumers or going out of business and being bought up by larger farms.





# Signals of this future that we see today



## Cost of living crisis

Food and non-alcoholic beverage [inflation in Europe remains higher](#) than the overall inflation rate owing to the dependence of EU agriculture on fossil fuels, imported inputs and animal feed, and 'greedflation'.

In 2022, 735 million people went undernourished, with [30% of the world's population facing moderate to severe food insecurity](#). In the UK, reductions in inequality have stalled, with the bottom 50% of the population accounting for only 5% of all wealth, and 20% of all income in 2020.



Help Us Feed  
The Future



American company, [Air Protein](#), is reimagining food creation, using air fermentation and cultures to produce protein. The production process is 'carbon-negative' and the meat alternative contains no animals, soy, hormones, pesticides, herbicides, or GMOs.

Scenario Two

# Global Regeneration



## Overview

---

In a world ravaged by climate stress, people have pulled together to adapt to and address the uneven impacts. This is a world of inter-governmental collaboration. Through a concerted effort, a level playing field of regulation and environmental protection has been created.

Consumers are demanding safe, affordable, and nutritious food as a basic global right, and governments and businesses are investing in the conditions to ensure this. Farmers are part of an ever-growing network of interconnected buyers and sellers, with innovative business models ensuring fairness and equity for all.





## TRENDS SHAPING THIS FUTURE



- *ENVIRONMENT: A focus on climate, nature and biodiversity action, including a global biodiversity framework and EU focus on nature restoration and strong emissions cuts.*
- *PRODUCTIVITY: Crop yield reductions and failures due to poor soil quality and weather extremes. A focus on the global need for climate, environment and health positive solutions.*
- *POPULATION GROWTH: Driving the need to feed more people with fewer resources*
- *TECH INNOVATION: Rising interest in and commitments to regenerative agriculture practices*
- *TRANSPARENCY: Mainstreaming of sustainability/climate risk reporting, led by the EU*
- *CONSUMER ATTENTION TO CLIMATE: Driving commitments to regenerative agriculture*
- *HEALTH AND WELLBEING: People who can afford it are prioritising (perceived) healthy choices, and tech-tailored nutrition*



## What does production look like in this future?

- Beyond Net Zero commitments, climate adaptation is high on government agendas, and the world has been moving steadily towards a high-tech, post-fossil fuel future.
- Diverse growing technologies such as low carbon greenhouses, protected cropping, vertical and indoor farming have replaced the intensive farms of the past. Fruit and veg are grown in much higher volumes but concentrated in areas that are best suited climatically.
- Field production is an efficient, more nutrient-circular version of agriculture. Fallow, green fertilizers, and biotechnology all allow nature-based processes to support production.
- Livestock are integrated in production where they are best suited climatically, boosting soil health and biodiversity. Land no longer used for animal feed is boosting biodiversity and providing other ecosystem services as part of extended rotations.



## What does consumption look like in this future?

- New technologies have enabled disparate groups to be better connected; farmers with consumers, health agencies with food technologists, trade bodies with chefs and restaurant groups.
- Health and wellbeing are prioritized, with governments setting more stringent guidelines for advertising and production. New innovations are helping people to get the nutrients they need.
- People eat a much more varied diet, with locally produced and imported fruit and veg supplemented by bespoke nutritional solutions.
- Consumers are demanding more ethical and sustainable foods and companies are having to be more transparent about where their products come from.



# Signals of this future that we see today



## True Cost Pricing

In Germany, products in [Penny shops are being sold at their 'True Price'](#), meaning the price includes the environmental and health costs consumers and society eventually pay.

## EU Deforestation Regulations

The [EU Deforestation Regulation](#) requires companies to show that imported and domestically produced commodities sold in the EU have been produced without deforestation or forest degradation.



## 90% Organic Procurement in Denmark

Denmark has been [changing public buying practices](#) without impacting overall budgets through action on the food system, along with strong educational links and societal buy-in.



Scenario Three

# Homegrown





## Overview

---

Global volatility and disruption mean that the global food system can no longer deliver what we need reliably or efficiently, with too many shortages of critical items.

Communities don't want to feel so vulnerable and are working to quickly get things back under control by bringing everything closer to home. Resilience and efficiency are about agility and matching local and regional supply and demand in smart ways, while making the most of what we've got and not wasting anything.





## TRENDS SHAPING THIS FUTURE



- *SUPPLY CHAIN FRACTURES* and demand for new foods that deliver resilience
- *GEOPOLITICAL INSTABILITY* and increasing global volatility
- *CITIES-BASED POLICY* focuses on shorter, more resilient food supply chains and local production for cities
- *LOCAL OR SHORTER SUPPLY CHAINS* with fewer intermediaries in response to post-Covid, Russia/Ukraine conflict and other pressures impacting international shipping
- *DIGITAL INNOVATIONS* matching smaller suppliers/volumes with demand, and providing high levels of traceability and transparency
- *CONTINUED DEMAND FOR “LOCAL”* driven by multiple factors including perceptions of sustainability and desire to support local farmers and ensure local food security.

## What does production look like in this future?

- Production is dominated by short and local supply chains, linking consumers more closely with producers.
- Producers are collaborating with one another to share knowledge and innovations for regenerative agriculture, and to help to manage transition costs.
- Farmers lease or share equipment; food manufacturing co-operatives share processing and packing equipment.
- Digital and physical food hubs enable the aggregation and distribution of a wider range of crops in smaller volumes from a large number of smaller food producers.
- The retreat from unreliable global markets has forced everyone to innovate to replace missing products. Everything available is used to feed people, and circularity is highly valued with waste or left-over ingredients from factories, shops or kitchens taken back into the system as raw material for compost, energy or other uses.





## What does consumption look like in this future?

- Consumers want to feel they're supporting their local communities and farmers, and farming methods that are solving rather than creating problems.
- Consumers are adjusting to eating more local and seasonal foods.
- Most people long for the internationally-sourced foods they used to take for granted and now mostly can't afford or even access. Local producers have been innovating to supply alternatives, finding a market for everything they produce.
- The transition is proving expensive so consumer groups and community kitchens bulk-buy foods and share cooking costs.
- Employers, local authorities, health services and schools collaborate to try to ensure everyone gets fed and any waste can be collected back into the system.



# Signals of this future that we see today



## Consumer awareness of sustainability

A [2023 Deloitte study](#) shows increasing consumer awareness with one in four consumers prepared to pay more to protect biodiversity; for sustainable products and packaging; or for products or services that respect human rights or commit to ethical working practices.

[Collectiv Food](#) is an automated food supply service, sourcing meat, fish and plant-based products directly from producers to deliver to professional kitchens. It aims to reduce emissions in cities delivering to chilled units in underused spaces in key urban locations.



## Food Shortages

Climate breakdown-related weather events will almost certainly hit [global agricultural production and crop failures with increasing frequency](#), threatening food availability, especially when more than one global 'breadbasket' is exposed at the same time.

# What did workstream participants discuss about each scenario?





## Scenario One: Sustainability Amplified



In this scenario, routes to market are shaped by a heightened focus on sustainability. This is driven by government regulations, consumer demand, and gradual technological innovation.

- Some farmers are supplementing conventional retailer supply with natural capital trading.
- Others have focused on building a brand, selling direct to large networks of customers through new digital platforms.
- Others have moved towards shorter supply chains and better community integration.

Regen remains niche, retrofitted into the conventional system, and farming remains unprofitable which presents challenges. Amongst them are the affordability of nutritious food, the dominance of large corporations, farmer exit rates, and the need for greater collaboration up and down the supply chain. Retailers have continued their focus on efficiency, squeezing farmers and processors, while substituting for imports wherever preferable. In this world, collaboration is key, with communities trying their hardest to leave no one behind.

### **Key Opportunities:**

Incentivising businesses for adopting regenerative practices.

Forging closer ties with nutrition and healthcare professionals, potentially leading to improved public health outcomes.

Investment and innovation on farm drives climate adaptation and enables diversification.

### **Key Questions:**

How can regenerative food practices be made more accessible and affordable to ensure sustainable nutrition for all?

How will we (and should we) overcome the greater control of the food system by large corporations?

How can the focus of the food system be shifted towards resilience, rather than short term efficiency?

## Scenario Two: Global Regeneration



In this scenario, routes to market have transformed. A collaborative global effort means the food system now prioritises sustainability, equity, and health.

- Certification, regulation, and data transparency are front and centre to ensure clarity and fairness in markets.
- Food hubs dominate the logistics, trade, and processing landscape. This allows for access to food from other regions, while maintaining efficient logistics and reducing pinch-points.
- Local food still dominates, however, imports are seamlessly combined to top-up the last 20% of requirement.

The reliance on centralised policy gives rise to large lobbying efforts, requiring collective action to maintain the progress already made. This is made easier by large, open-source, global data systems evidencing the impacts of this great new food system.

### **Key Opportunities:**

Implementing open data solutions and trading hubs to facilitate new, fairer, regenerative food markets.

Shifting focus towards nutrient-dense food production, prioritising both health and environmental sustainability.

Fostering greater democracy within the food system, ensuring diverse voices are heard in policymaking and the market design.

### **Key Questions:**

How can we balance a globalised food system with the need to support local producers?

How can policy be more inclusive, ensuring that all stakeholders have a voice in shaping certification and regulation?

What are the environmental and social costs of maintaining this global food system, and do these outweigh the benefits?

What does retail look like in this future and how has the role of supermarkets changed?

## Scenario Three: Homegrown



In this scenario, the shift towards a localised food systems emerges in response to global volatility. This has fostered increased resilience and community empowerment.

- Farming sees shorter supply chains, increased collaboration, and a focus on regenerative agriculture.
- Food hubs, direct selling, and community-supported agriculture aggregate and distribute a wide array of locally produced goods with innovation and circularity filling the gap left by international products.
- Regional level coordination de-risks local consumption and production patterns including climate risks, with new digital infrastructure shifting surpluses where needed.

Citizens and governments prioritise support for local farmers and sustainable farming methods. Land rental is long term and incentivises broad environmental stewardship. The food system feels like a community. While large brands still serve some purpose, much more profit is staying within local communities due to the decline of global commodity markets

### **Key Opportunities:**

Investing in food hubs can support local communities and provide economies of scale.

Embracing cooperative ownership structures can democratize the food system and foster equitable distribution of resources.

This scenario sees people returning to the land, enlivening and building rural communities.

### **Key Questions:**

How can land ownership models, capital investment and corporates be reimagined to ensure equitable access to food and prevent the re-concentration of power?

What is the role for alternative protein sources in this future, and can this be community owned and operated?

What role should the public sector and regulation play in facilitating the transition?



# Describing routes to market in the scenarios

Below is a list of features of regenerative routes to markets that came up in the scenario discussions in the Routes to Market workshop. The similarities between scenarios are highlighted in blue, as elements that would be likely to exist in a future with regenerative routes to market.



- Carbon pricing supported by **carbon labelling and certification**
- **More category specific brands and stacked businesses**
- **Platforms supporting local, shorter supply chains**
- Infrastructure for smaller growers that retailers connect into to increase food system resilience
- **Community – grower sourcing**
- Fewer farmers as farming is unprofitable
- More dynamic procurement
- Regen will be an asset to help risk management
- Supermarkets focus on efficiency which means that downstream is squeezed
- However, fewer farmers could mean more power over pricing and economies of scale
- **Data and auditing for certification and regulation**
- **More stacked businesses**
- Bioregions
- A global [open] **data solutions and digital platforms** with hubs facilitating trading
- A **national regulatory and infrastructure framework** where global foods only come in when it makes sense
- **Sourcing from many producers**
- **Livestock better integrated** into arable
- Food prices based on nutrition + taxation of sugar
- Simplified cross border regulations
- **Local food hubs** are as powerful as supermarkets were in 2024
- Regional governance and collaboration for infrastructure
- Infrastructure as a service
- Innovation and regulation of protein supply.
- More subscription models and **direct relationships between growers and consumers**
- **Processors** dealing with greater seasonal fluctuations.
- **National procurement and support** of local sourcing
- **Small scale, more distributed, digital infrastructure**
- Higher local procurement requirements for sellers
- **Food hubs that aggregate and manage quality**
- CSAs in every town
- Local markets and processing facilities
- Enthusiasm for plant-based diets and organic
- New land agreements
- More urban farming

Forum for the Future

f forumforthefuture

in Forum for the Future

▶ Forum for the Future

📷 forumforthefuture

🐦 Forum4theFuture

READ MORE ABOUT OUR WORK AT

**FORUMFORTHEFUTURE.ORG**

Get in touch:  
[info@forumforthefuture.org](mailto:info@forumforthefuture.org)

[Sign up for Forum's newsletter](#)