

"UK-grown edible horticulture produce was worth £3.1 billion in 2024, and the sector is ambitious to drive domestic consumption and exports by 40%-120%."

Farming Profitability Review, Minette Batters, 2025

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A business case for growing more fresh produce in the UK

A vibrant edible horticulture sector will help the government reach its core policy objective to grow the economy, as well as vital objectives on food security, public health, nature recovery, and decarbonisation.

This publication by the University of Warwick summarises a synthesis of evidence from strategic reports and academic publications.



"Horticulture sector highlighted as underfunded and neglected in R&D terms yet strategically vital to reduce import reliance, with relatively high output value per land area, and associated healthy eating benefits."

Feeding Britain Sustainably to 2050: The 30:50:50 mission, APPGSTA, 2025



"Multifunctional landscapes will deliver food security alongside flood protection and nature recovery, and build resilience to the effects of climate change. Healthy food becomes the affordable option by default, with flourishing UK horticulture creating rural jobs and reducing import dependence. Farmers earn fair returns as valued stewards..."

Roadmap for Resilience: A UK Food Plan for 2050, UKRI AFN+ Network, 2025



"A food systems transformation following recommendations from the EAT-Lancet Commission could lead to a less resource-intensive and labour-intensive food system that can supply a healthy diet for 9.6 billion people... as a part of this restructuring, some sectors ... would need to expand (eg, a 63% increase in fruit, vegetable, and nut production) compared with 2020 production levels."

The EAT-Lancet Commission on healthy, sustainable, and just food systems, 2025

"Without significant increases in UK food system and supply chain resilience, it is unlikely the UK would be able to maintain food security if ecosystem collapse drives geopolitical competition for food."

National Security Assessment in Global biodiversity loss, ecosystem collapse and national security, Defra, 2026

Reasons for investing in the UK Fresh Produce Sector

UK horticulture produces high-quality fresh fruits, vegetables and herbs. It has potential for increasing profitable and sustainable production which would enhance GDP, reduce food miles, increase food system resilience, support biodiversity on farms, and improve rural economies.



A 10% production increase in UK fruits and vegetables could add over £3.3 billion to the economy.



This is in addition to an estimated:

- Further £2.3 billion from expanding demand
- 23,520 jobs
- 3% overall increase in UK farm profits

Green Alliance (2025), The strong economic case for expanding UK Horticulture



The top 25% of UK horticultural farms and general cropping farms saw 30% and 55% returns on input costs (respectively) between 2021–2024.



Supporting another ¼ of horticultural farms to transition towards practices carried out by top-performers would increase domestic production and profitability, driving re-investment into horticultural innovation and measurable sustainability outcomes.

Using Horticulture Statistics 2025 (Defra)



Edible horticulture uses around 1% of the UK's agricultural land. Another 1% could increase the value of home-grown fresh produce to over £6.5 billion per annum.



Current production uses 130,000 Ha of UK agricultural land (16.7 billion Ha). Another 65,000 hectares could support a 50% rise in field crops and 20% rise in protected crops to replace imports. Doubling the area of edible horticulture would contribute another £3.5 billion to GDP at today's values.

Using Horticulture Statistics 2025 (Defra)



Fruits and vegetables are naturally nutrient-rich, ideal companions to current dietary preferences. Fortunately, a growing list of crops are becoming increasingly suitable for the changing UK climate.



Successes include haricot beans (main ingredient in baked beans), chickpeas, sweet potato, watermelon, kiwi fruit, peach, nectarine, passionfruit, new grape varieties, and even tea and citrus in Cornwall. Retailers are launching new nutrient-dense lines for GLPI users.

<https://www.just-food.com/news/ms-co-op-glp-1-friendly-ranges/>



Legumes (e.g. peas and beans) are rich in plant proteins and emit <1kg CO2e per 100g protein – close to Carbon Net Zero.



These emissions are over 25 times lower than per 100g of beef protein. Legumes, brassicas, fruits, seeds and nuts are also amongst the richest sources of dietary fibre; fresher food with a shorter farm-to-plate journey is also generally known to be more nutrient-rich.

Dimbleby (2021), Independent review, National Food Strategy



UK-grown apples are 2 to 3 times more energy-efficient than imports, and UK vegetables including broccoli, courgettes, carrots and asparagus, are at least 6—and up to 12—times more water-efficient than imported supplies.



The UK uses only 2% of its water budget on agricultural production. Increasing winter rainfall needs to be coupled with improved capture and distribution infrastructures, which would also reduce the impacts of flooding and economic losses associated with extreme weather events.

Knox (2012), Cranfield Water Science Institute, Water for UK Agriculture – Key challenges and opportunities



Water-capture systems and land-efficient greenhouse production—which offer 12 months' continual production on small amounts of land—would protect larger areas for agroecology schemes.



Supported investments in new and existing greenhouses would help the UK become up to 50% self-sufficient in fresh produce. This £14.1 billion investment would pay for itself within 3–7 years (est.) through import savings.

Batke et al. (2025), Protected and productive: How greenhouses should deliver UK food security

“It is imperative that edible horticulture is given more prominence in strategic thinking and policy making [across government], ... [and] targets for horticulture [should] be part of mainstream policies promoting national security, health, trade, education and science.”

Warwick Crop Centre, 2026

STRATEGIC RECOMMENDATIONS...

1. Business strategy and reform

- Release a cross-departmental business case for UK edible horticulture.
- Make horticultural businesses core to food system reforms.

2. Targets and policy integration

- Set production targets, aligned with population and health requirements, and collect value data.
- Integrate targets across wider policy, such as trade, education, health and science.

3. Training and technology

- Upskill and support workforce through systemic training programme.
- Advance support and integration of agri-tech, AI and other innovations.

4. Supply chain fairness

- Strengthen rules on contract fairness for both small and large businesses.
- Promote alternative markets, such as farmer co-ops and food hubs.

5. Innovation and partnerships

- Support establishment of a roundtable to address sector fragmentation.
- Invest in sector research, development and innovation.

...to give CROSS-POLICY RETURNS

Economic and Socioeconomic growth

- Sustainable growth in rural and bio-economies.
- A more profitable UK farming sector.
- More high-skilled jobs and associated training opportunities across the sector and in rural communities.
- Empowered public procurement and green economies.
- Upgraded national infrastructure for improved food security and economic resilience.
- Improved trading fairness and supply chain resilience.

Science and Food security

- Greater impact from world-leading genetics and agri-tech research.
- Guardianship of vital genetic diversity to future-proof crops and livestock.
- More resilient UK food supplies, resistant to global shocks.

Environment

- More food from less land.
- Agroecological gains and natural capital maximised.
- Net carbon gains realised by transition to horticulture.
- Inputs reduced.

Public health and Education

- Affordability and availability of fresh fruit, vegetables and herbs improved.
- Nutrient-dense, calorie-reduced diets available for everyone, reducing future strains on NHS.
- Food production seen as a public good.
- Farm-to-plate thinking developed for UK food system revision.
- Improved education in food, sustainability and healthy eating.

KEY IMPACTS

- £ Increased farm yields and profitability.
- £ Natural resources protected whilst promoting climate resilience and biodiversity.
- £ Improved food system resilience.
- £ Rural enterprise and rural welfare boosted.
- £ True value of sector shown to UK GDP.
- 🏆 Food miles reduced.
- 🏆 Public health revived with nutritionally-dense produce that is affordable, available and local.
- 🏆 Pride restored in our farmers and in British food.





“Horticulture has a vital role to play in delivering economic growth, improving public health, and addressing environmental challenges.”

Dame Angela Eagle

<https://sustainweb.org/news/nov25-sustain-welcomes-government-commitment-to-a-horticulture-growth-strategy/>

“From genomics and biotechnology to robotics, AI and precision agronomy, we have the means to produce more food with less impact. [...] Now we need the political vision and leadership to make it happen.”

George Freeman, MP

<https://scienceforsustainableagriculture.com/georgefreeman6>

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For further information, please visit our Fresh Produce Knowledge Exchange Hub: <https://warwick.ac.uk/fac/sci/lifesci/wcc/fpknowledgehub/>