Food, Farming & Countryside Commission

Moving towards more sustainable regenerative farming

Why this is important for food and nutrition advice

Dr Courtney Scott

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Feeding Britain

Farming is more productive and feeds more people than ever before. Supporting jobs, the rural economy and managing 70% of our nation.

But as it grows, so does its impact:

The Cost to the UK Climate

UK agriculture accounts for 10% of our emissions.

- Methane – from ruminant livestock and manure management
- Nitrous oxide – from agricultural soils
- Carbon Dioxide – from farm machinery and combustion

The cost to wildlife

Post-war farming methods are one of the main causes of species and habitat loss in the UK.

48% decline in farmland birds across 19 key species since 1970

1/2 of all Britain’s hedgerows lost since the Second World War

80% of UK peatlands damaged by the way they’re managed


The cost to water and soil
Harmful farming practices have contributed to:
14%
of English rivers meet good ecological status, with pollution from agriculture, sewage, roads and single-use plastics
90%
wetlands lost in the last 100 years and 10% of freshwater and wetland species threatened with extinction
1/3
estimated drop in earthworm populations in last 25 years – a key indicator of soil health

Our global impact

The food system is responsible for 1/3 of global greenhouse gas emissions

Global Deforestation caused by

- Beef farming in South America, clearing forest for pasture
- Soy - 80% soy is used in animal feed around the world
- Palm oil – driving mass deforestation, loss of habitat for endangered species, releasing GHGs

Challenges Facing Agriculture

Climate Change

- Extreme Weather events such as increased floods, heatwaves and droughts lead to falling yields
- New pests and diseases thriving in a changing climate

Labour

Global price spikes and trade deals

- Fertiliser and fossil fuels are vulnerable to fluctuations in global price.

Antimicrobial resistance

Uncertainty in future UK agricultural policy and funding schemes

The Declining Nutrient Density of Food

Table 1. Nutrients' decline trend (%) in different fruits* and vegetables* during 1975 to 1997.

Fruits	Calcium	Iron	Vitamin A (IU)	Vitamin C	Vegetables	Calcium	Iron	Vitamin A (IU)	Vitamin C
Apples (mg)	None	40.00	41.10	Up 42.50	Broccoli (mg)	53.40	20.00	38.30	17.50
Apricots (mg)	17.70	Up 8.00	3.30	None	Cabbage (mg)	4.10	Up 47.50	Up 2.30	31.90
Banana (mg)	25.00	55.70	57.40	9.00	Carrots (mg)	27.00	28.60	Up 155.70	Up 16.30
Cherries (mg)	31.80	2.50	Up 94.60	30.00	Cauliflower (mg)	12.00	60.00	68.30	40.50
Grapefruits (mg)	25.00	85.00	87.50	12.40	Collard greens (mg)	28.60	81.00	41.20	61.60
Lemons (mg)	57.40	14.30	3.30	31.20	Daikon (mg)	22.90	33.30	100.00	31.30
Orange (mg)	2.40	75.00	Up 2.50	Up 6.40	Kale (mg)	24.60	22.70	None	4.00
Peaches (mg)	44.40	78.00	59.80	5.70	Mustard greens (mg)	43.70	51.30	24.30	27.80
Pineapples (mg)	58.80	26.00	55.00	9.40	Onion (mg)	25.90	56.00	100.00	36.00
Strawberries (mg)	33.30	62.00	67.10	3.90	Parsley (mg)	32.00	None	38.80	22.70
Tangerines (mg)	65.00	75.00	Up 119.0	7.00	Turnip greens (mg)	22.80	38.90	None	56.80
Watermelons (mg)	Up 14.30	66.00	38.00	Up 37.10	Watercress (mg)	20.50	88.20	4.10	45.60
Net Change	28.90	16.40	16.40	1.90	Net Change	26.50	36.10	21.40	29.90

* Based on 100-gram edible portion. Source: USDA food composition tables.

Foods **2024**, *13*(6), 877; https://doi.org/10.3390/foods13060877

Is there a different way?

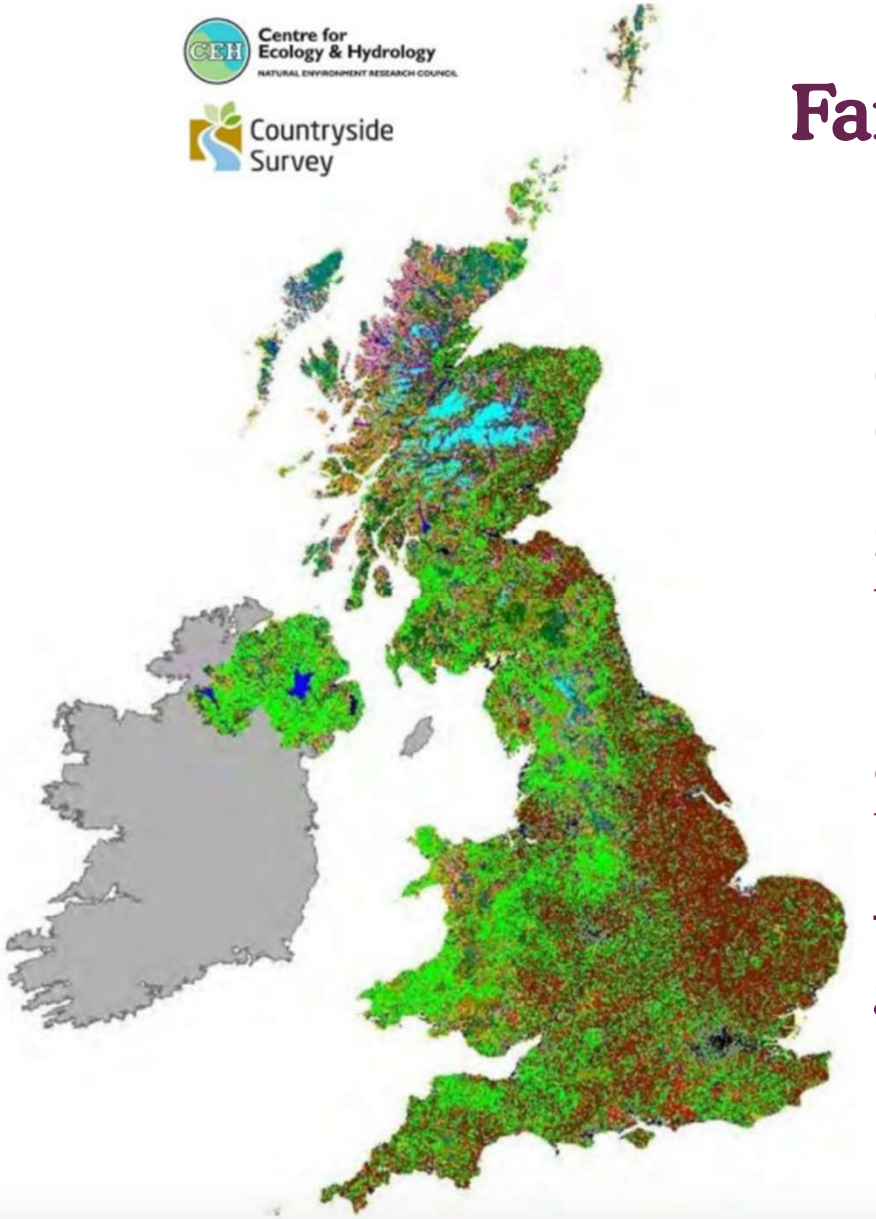
How does nutrition and health play into this?

An Agroecological Future:
A Different Approach

What is Agroecology?

Agroecology is a growing movement, including farmers and food producers who are using fair and sustainable regenerative practices. But it is more than a way of farming - it is a way of describing a healthy food system with huge potential to tackle climate change, regenerate landscapes and restore nature.

Find out more about agroecology at ffcc.co.uk/agroecology



Fair *and* Sustainable

Grow more of what the land is ecologically suited to grow, without chemicals

Sustain viable farm businesses in a flourishing rural economy

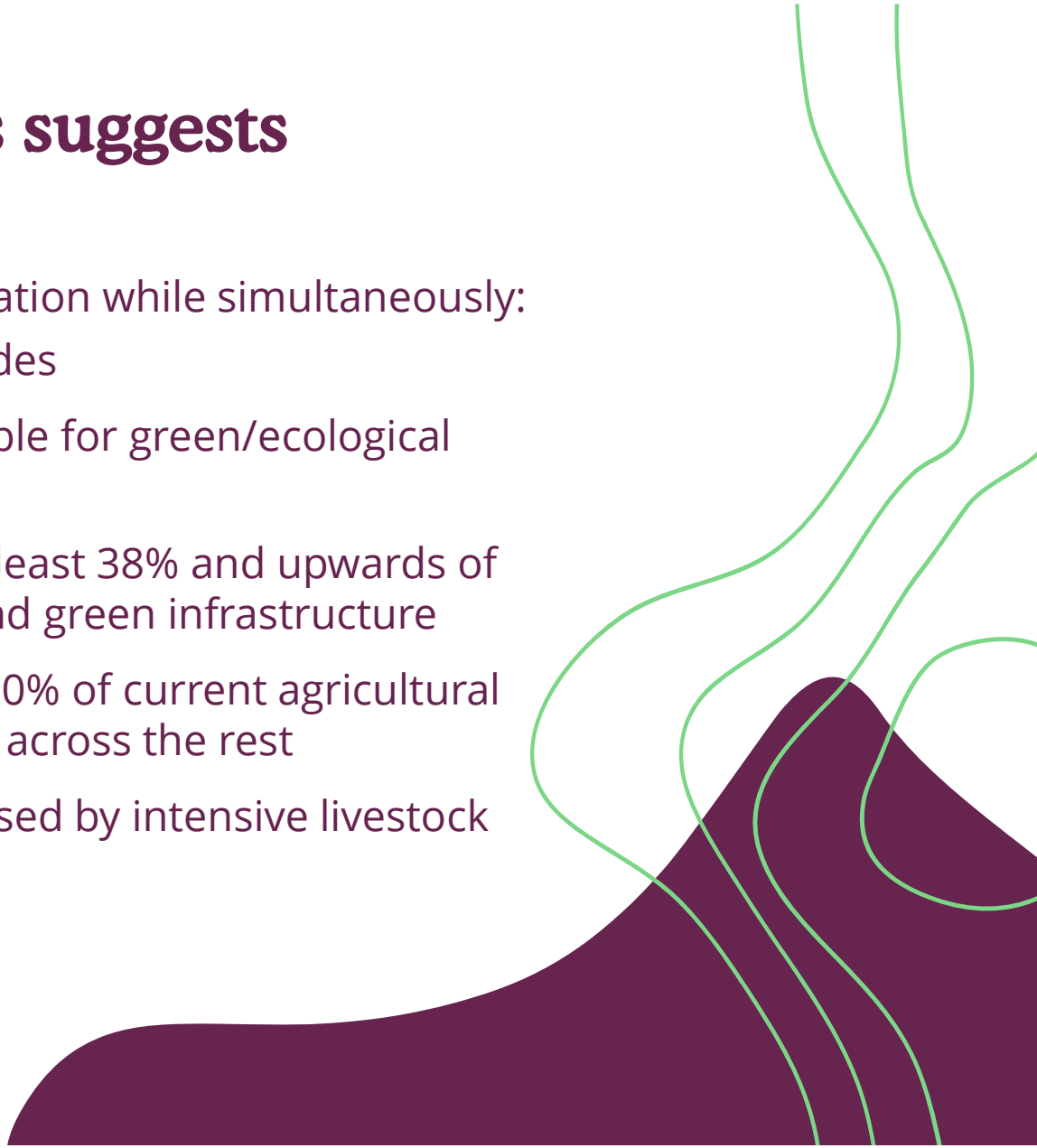
Develop a more localised, healthy and secure food system that works for all citizens

The UK buys more of what the UK grows, makes and sells

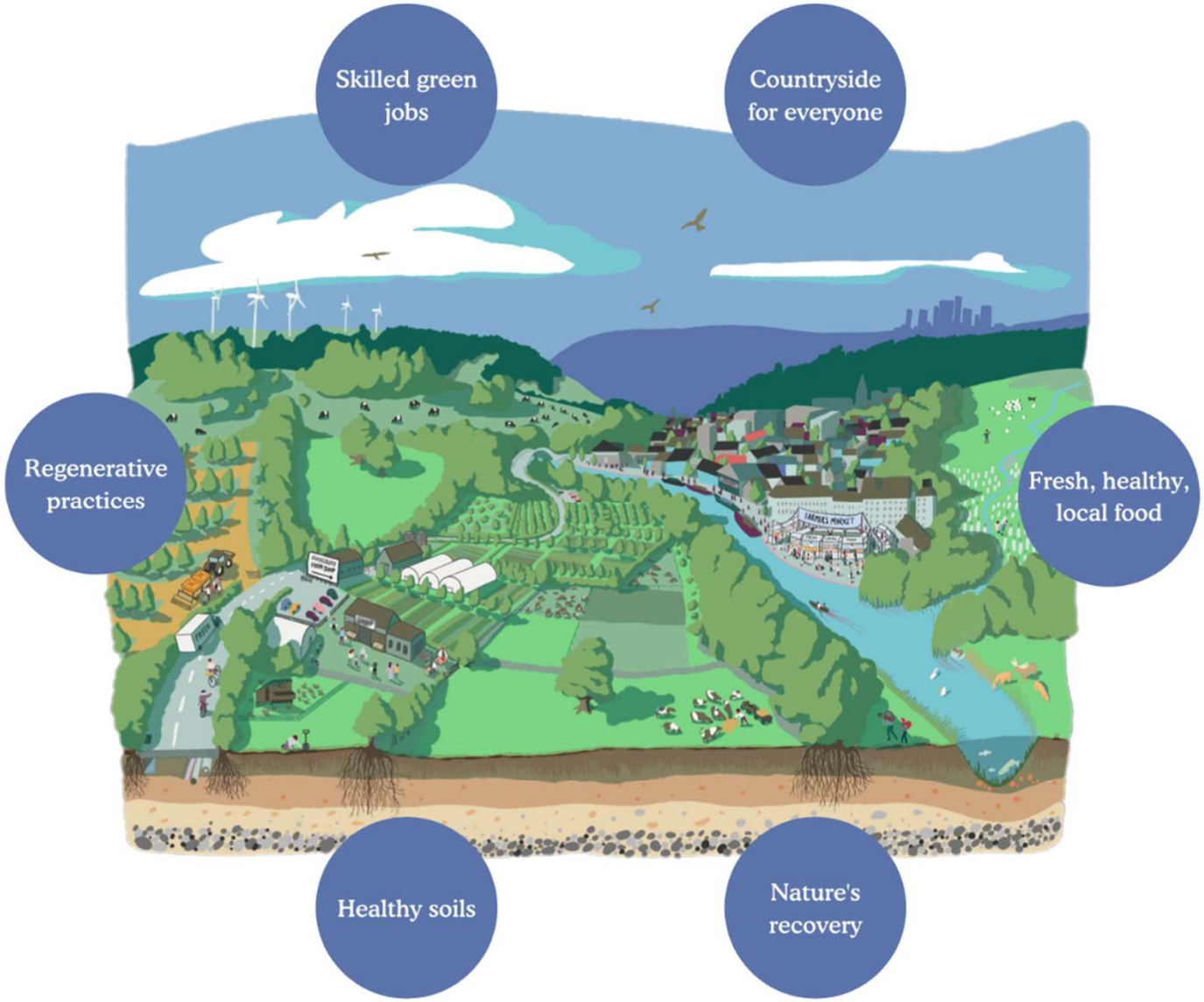
Our modelling with partners suggests agroecology can…

Grow enough healthy food for a future population while simultaneously:

- Eliminating synthetic fertilisers and pesticides
- Nearly doubling the amount of land available for green/ecological infrastructure
- Reducing greenhouse gas emissions by at least 38% and upwards of 70% if you include forestry, agroforestry and green infrastructure
- Supporting species abundance, restoring 10% of current agricultural land to nature and nature friendly farming across the rest
- End UK's contribution to deforestation caused by intensive livestock farming



Farming for Change 2021, IDDRI for FFCC



What could happen if we accelerate this change?

What this will look like

‘Modern Mixed Farming’

Prioritise farmland for food, then animal feed, then non-food uses (eg energy)

Reduce waste dramatically
Manage yield and productivity loss by rebalancing overconsumption

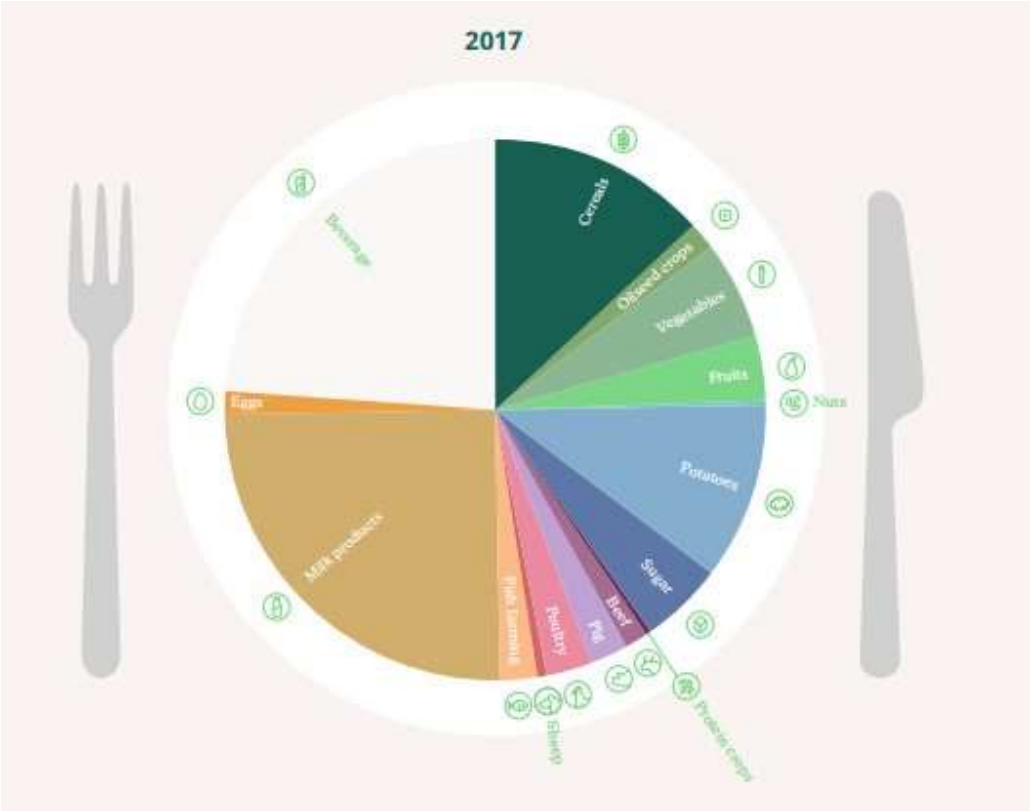
Prioritise ruminants who can thrive on grass and support soil fertility

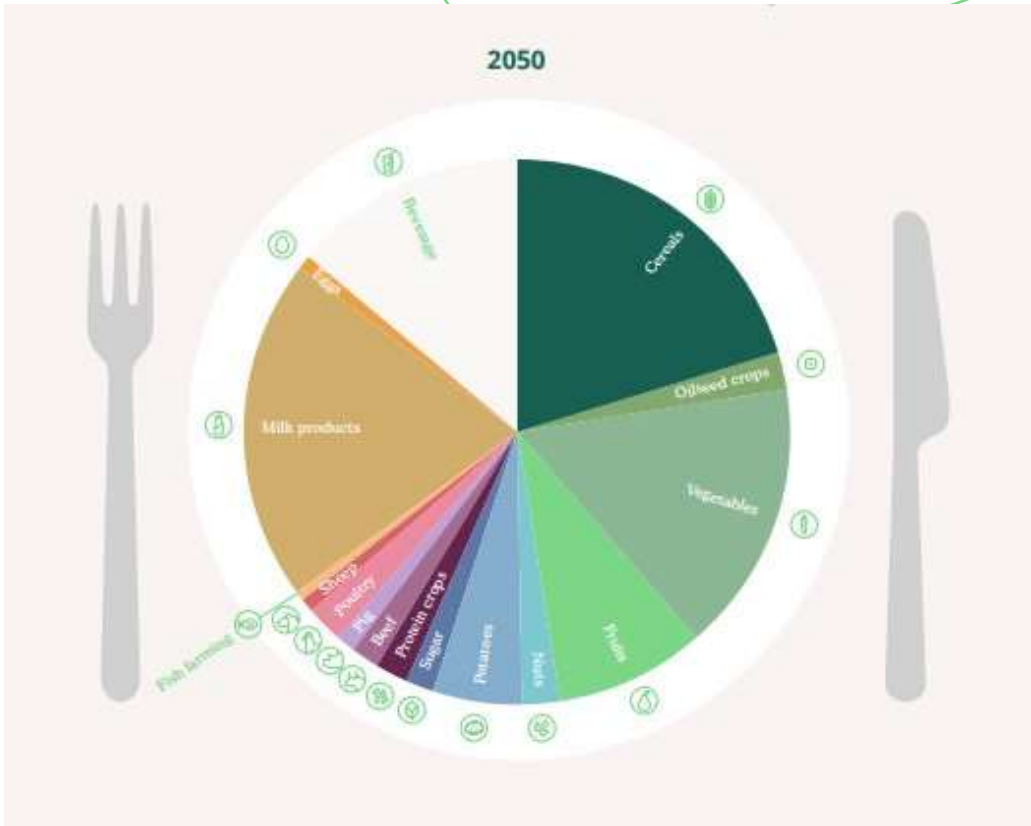
Protect soils – limit disturbance minimum or no tillage systems

Keep soils covered with fertility building crops

Remove synthetic inputs – fertilizers and pesticides – using natural methods instead

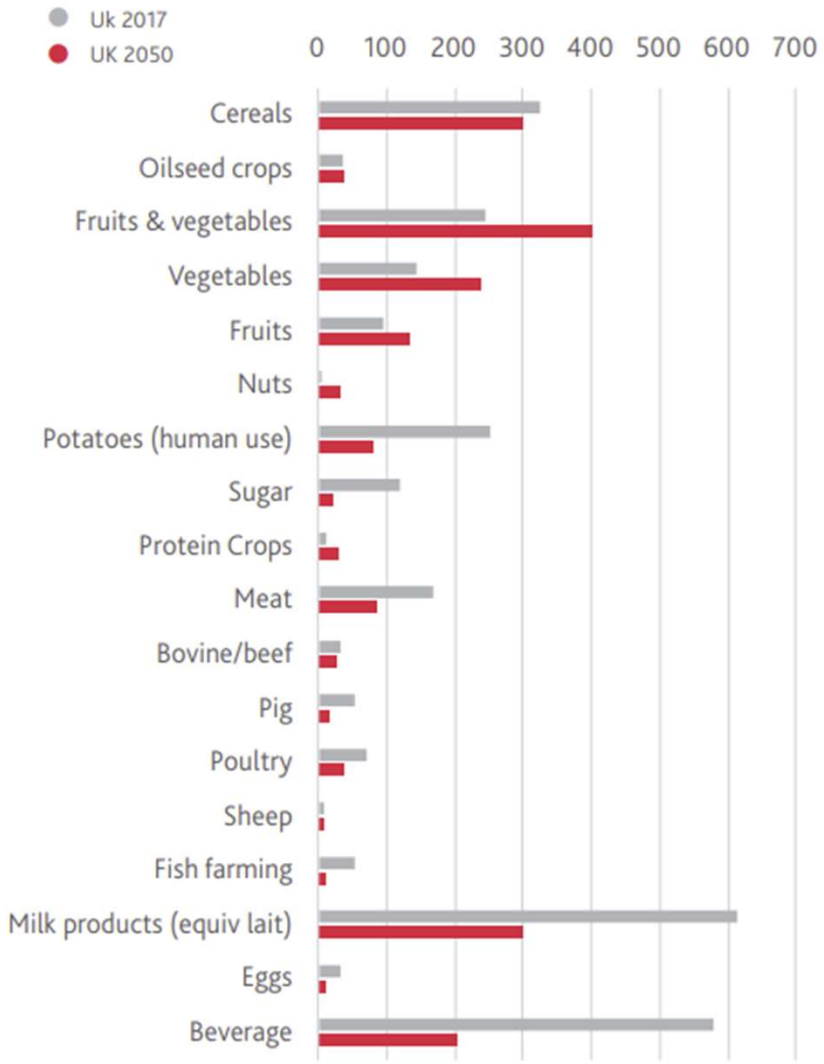
What this will look like for Diets & Nutrition





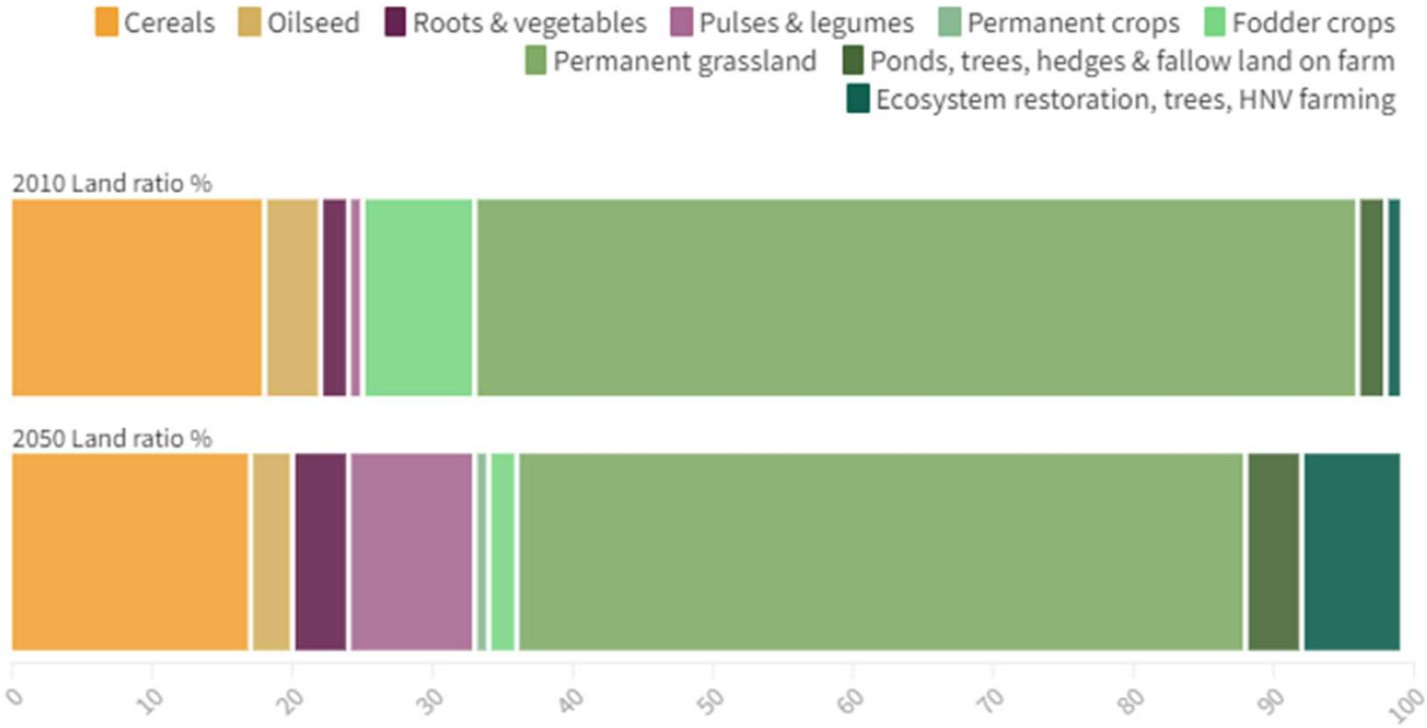
Food, Farming & Countryside Commission, 2021. Farming for Change

FIGURE 7. UK diet in 2017 and in TYFA UK 2050 (g/day)



Source: FAO and authors

What does this look like on the ground?



More land under pulses, legumes, root crops and vegetables

Less land under fodder crops, permanent grass, cereals and oilseeds

More space for nature

What does this mean for dietary advice and next steps?

Areas of Alignment – Eatwell Guide

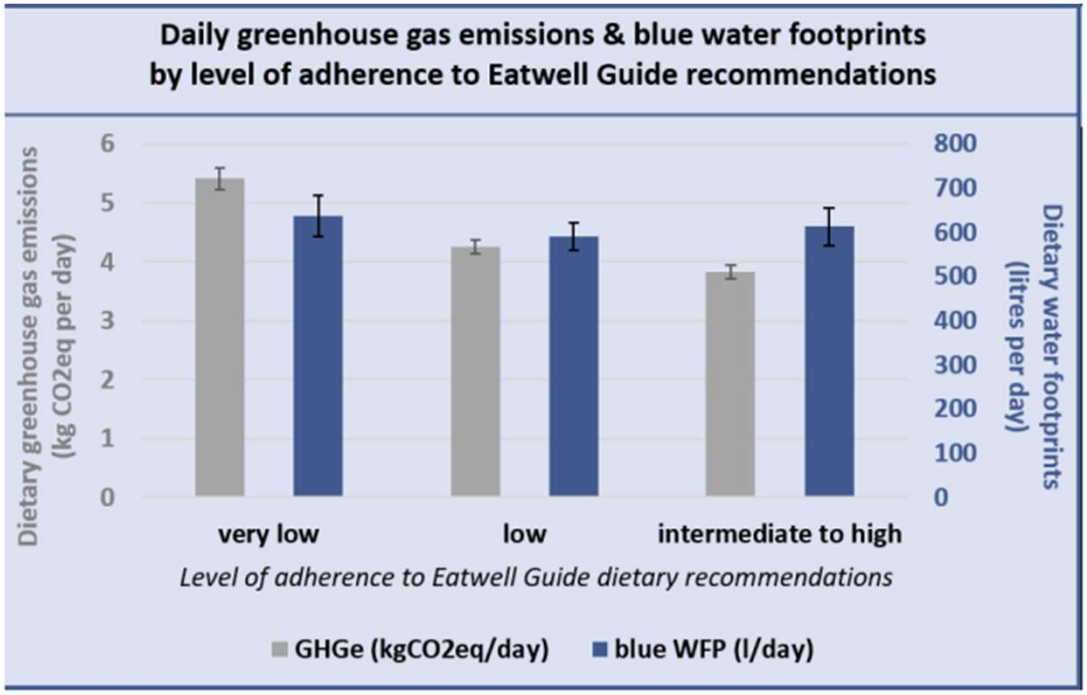


Figure 4 Average daily GHGe in kg CO_2eq and average daily dietary water footprints comparing diets with very low (score 0–2), low (score 3–4) and intermediate-to-high adherence (score 5–9) to the Eatwell Guide dietary guidelines. GHGe, greenhouse gas emissions. WFP, water footprint

Areas of Alignment - Pulses

Beans Are Affordable, Versatile & Delicious!

Beans have been part of many global cuisines for millennia and are one of the most widely consumed food types in many low-income settings. You can purchase them dry, canned or jarred and they are shelf-stable and store for long periods of time. They are versatile and can be prepared and incorporated into a variety of foods, including meals, desserts, snacks, sauces, spreads and even beverages.

Beans Are Good For The Planet!

Incorporating beans into agricultural practices can improve soil and water quality. Beans reduce the need for synthetic fertilisers by converting atmospheric nitrogen into a plant usable form. They use less water than many other crops, helping to conserve water.

Beans Are Nutritious!

Beans are nutrient-dense, rich in protein and dietary fibre, which is great for gut health. They have no cholesterol, are low in fat and rich in micronutrients including iron, potassium and B vitamins like folate.

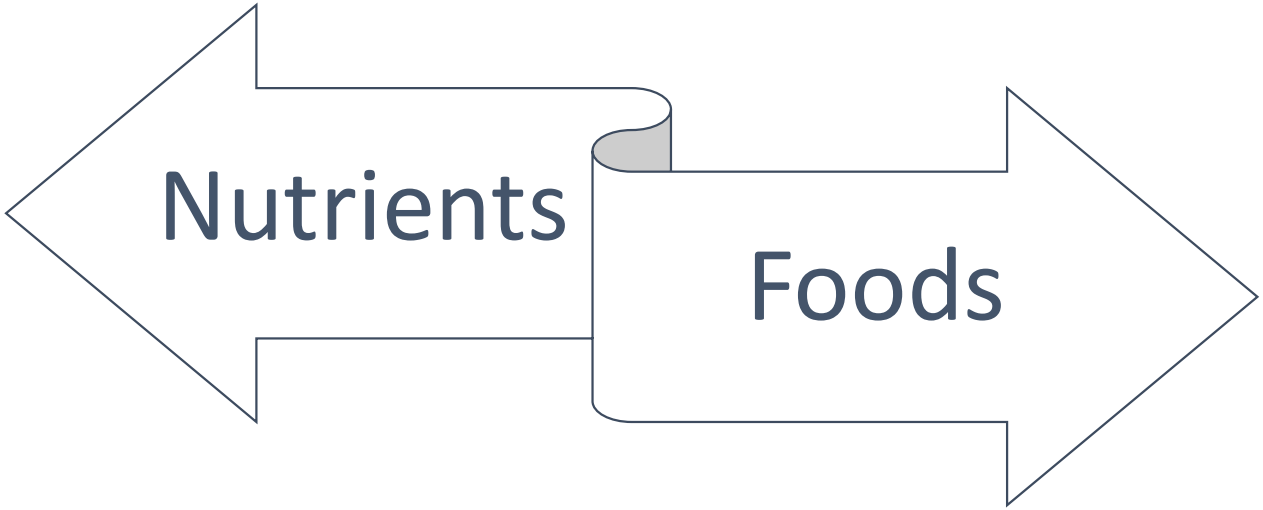
'Beans is How' campaign – SDG2 Hub - https://sdg2advocacyhub.org/beans-is-how/

Areas of Tension – An Example

River Wye pollution leads chicken firm to be sued

In 2023, pollution levels in the River Wye led Natural England to reclassify its status to "unfavourable-declining"

Taking a broader view on diets



Framing foods as a carrier of 'nutrients from nowhere' like this also teaches us to ignore the seasons, growers, climate justice and in turn presents 'health' as an individual lifestyle pursuit rather than a process of social change including food sovereignty for collective flourishing.

Lucy Aphramor - https://www.foodethicscouncil.org/opinion/reframing-nutrition-beyond-the-binary/

How do we get there – diet

Dietary advice:

- Far more **fruit, vegetables, nuts and pulses** -- even better, for those who can, if they can be sustainably produced (e.g. agroecological/ regenerative/organic)

- **“Less but better” meat and dairy**
  - Dieticians/nutritionists can help make this recommendation practical for people – it's not all or nothing – and reducing meat brings in space for other things we need to be eating more of

- **Less sugar** –> less HFSS and UPF – which are also underpinned by unsustainable production of commodity crops to make affordable

- Consider advice about how to make more **sustainable diet more practical** – where to buy, how to buy and cook in bulk with seasonal items, how to meal plan and cook ahead, design menus that focus on flavour and deliciousness

- **Food waste** – tips and advice on how to reduce

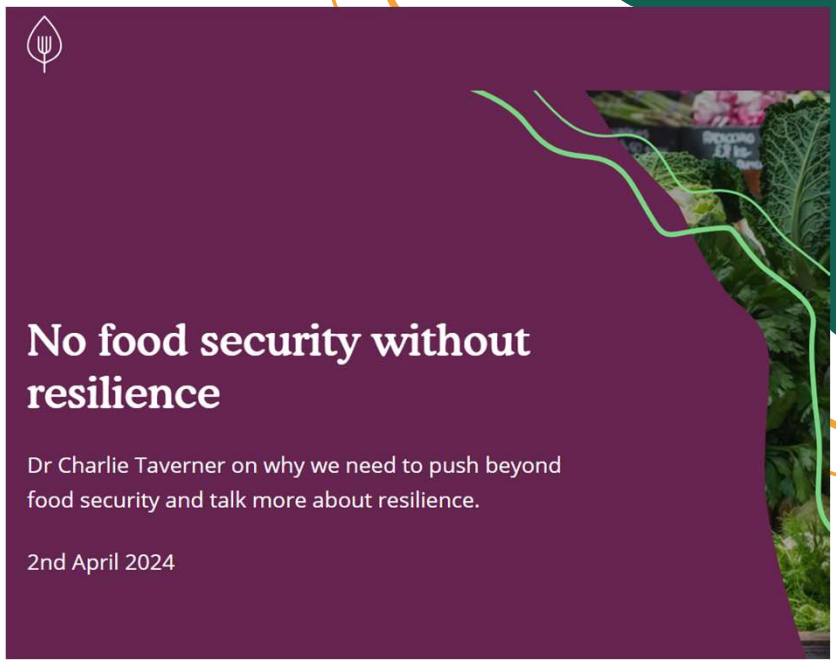
How do we get there – system change

Considering the everyday realities of dietary inequalities and food insecurity….

….need to advocate for upstream solutions and changes

“Cheap” food system has long term consequences – furthering climate change – and increasing risk of food insecurity

Need to strengthen resilience and livelihoods, for farmers and citizens



https://ffcc.co.uk/conversations/no-food-security-without-resilience

How do we get there – Food policy

- Enable a just agroecological transition
  - Maintaining current public investment and redirecting subsidies which damage climate, nature & health
  - Set a legally binding target for regenerative farming on three-quarters of farmed land
- Strengthened food policy governance
  - Create a food minister responsible for the food system – from farm to fork
  - Create a binding Food Strategy – building off the work that has been done so far, including the national food strategy.
- Harness the power of public procurement

Inspiration – Hospital Food – New York and Germany

NYC Healt
Culturally-D
Primary Di
Its 11 Publ

NYC Health + Hospitals/E
offering tasty, healthy, me

Builds on successful 'Meatless Mon
summer

Jan 09, 2023

In the leafy Berlin suburb of Zehlendorf, where Burrichter's meals land on the plates of patients at Waldfriede hospital, staff say few people complained when they swapped to a planetary health menu. "The fact it was so uncomplicated came as a surprise to us," says the hospital director, Bernd Quoß.

Cutting down on meat freed up money in the budget to buy fresh, local ingredients, says Janine Briese, the head of catering at Johannesstift Diakonie. "People must not have the feeling that meat is being taken away from them. You have to create tasty alternatives."

What do UK Citizens Want from the Food System?

Food, Farming & Countryside Commission (FFCC) is currently undertaking the biggest national conversation about food and the food system

#TheFoodConversation

- Fairness/Justice
- Transparency
- Shared ownership of problems
- Holistic solutions
- Ruthlessness in requiring action

Citizens want government intervention in the food system

- A healthier, greener food environment
- Support for farmers to farm more sustainably
- Taxes and regulations
- Practical help for citizens to eat more healthily and sustainably
- Visible political leadership when it comes to food

Food, Farming
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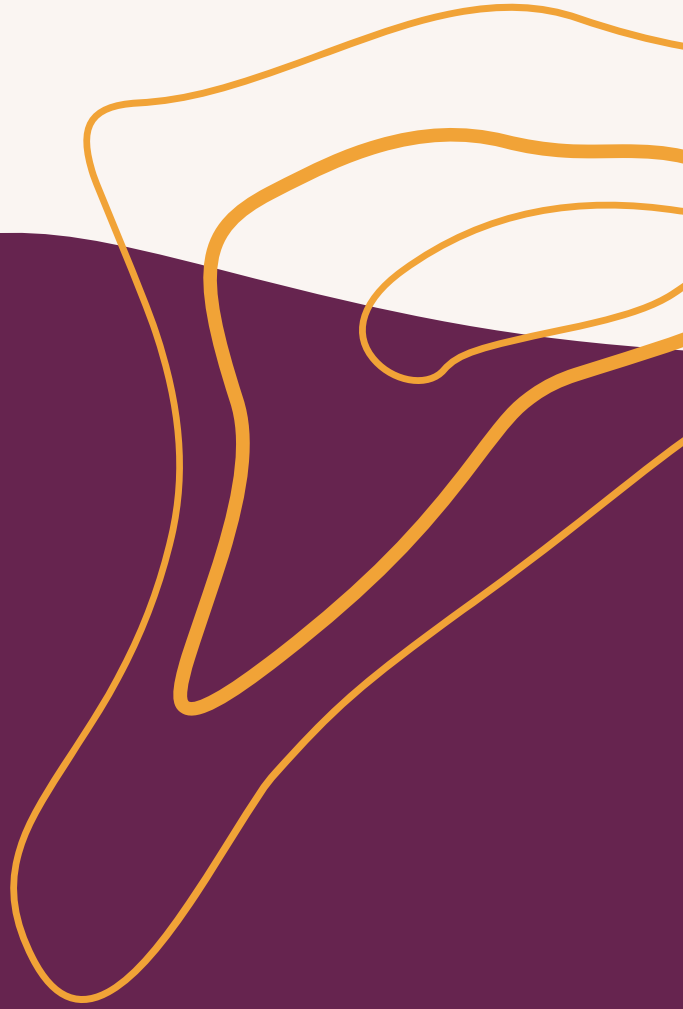

Dr Courtney Scott

hello@ffcc.co.uk

@dr_cscott