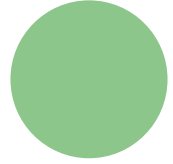


A GOOD FOOD NATION FOR SCOTLAND

WHY AND HOW



Scottish
Food
Coalition



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Executive summary

OUR GLOBAL FOOD SYSTEM IS BROKEN.

The burden it is placing on our economies, our health and our planet, is unbearable. Yet the path to a healthier, fairer and more sustainable food system appears elusive. In Scotland, we have reached a critical point on this journey.

The long-awaited Good Food Nation (Scotland) Bill will finally be passed this year. Along with other planned related legislation, its impact could be profound: shaping everything from the nation's diet and health to communities' resilience, from farming practices to animal and fish welfare, from how food businesses operate to how Scotland protects and restores its land and nature in the face of looming ecological and climate crises.

This report offers a roadmap to radically reforming Scotland's food landscape. First it draws on the best available evidence on food systems to lay out the scale of the challenges. Then it shows what a better food system can look like. Finally it outlines the route towards achieving the food system transformation we urgently need.

It's a transformation that will require systemic change across multiple areas of policy and practice, and a strong legislative framework that balances different stakeholders' competing interests, power dynamics and resources. All of us - governments, businesses, communities and households - will have to reframe how we value, produce, process, procure, supply, consume and dispose of food and drink.

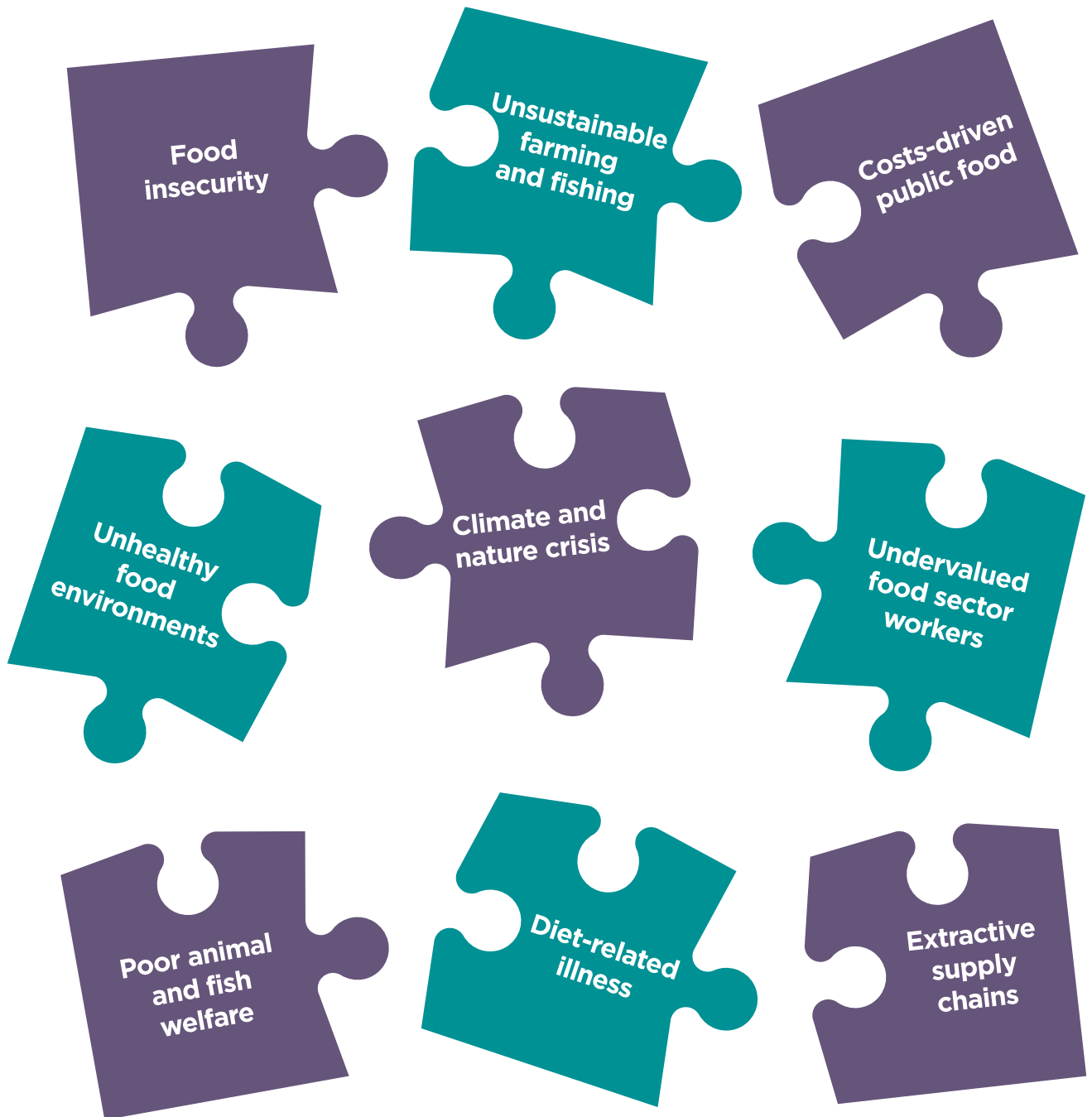
The Good Food Nation Bill can provide a strong legislative framework for achieving this. To succeed, it must agree on a common purpose and shared direction of travel. It must provide the resources for generating new national, local and public body food plans, and their delivery.

To improve public health, protect and restore the environment and deliver a raft of economic and social benefits, we will also require a concise set of measurable outcomes. These should be crafted based on public consultation, with local flexibility in how they are delivered, and with explicit mechanisms - and funding - for independent monitoring, research and innovation. In this way, our food system can be remodelled, and peoples' lives transformed.

This is no pipe dream: communities the length and breadth of Scotland are already showing how it can be done. From Shetland's vibrant local food economy to the charity that supports older people to access healthy food in Dundee; from the Perth food waste company working with local authorities to overcome barriers to recovering green and food waste, to the small businesses joining forces to operate short supply chains in Dumfries & Galloway and the Borders: this report offers inspiring snapshots of what doing food better can look like.

This is our collective vision for a fairer, healthier and more sustainable food system which Scotland - and the world - so desperately needs, and the paths we need to take to get there.

Chapter 1: We must do better because...



... Our food system is broken

The post-war model was designed to feed a growing population with cheap food produced through intensive techniques. Now it is pushing us to exceed the environmental limits within which humanity can safely exist¹. While advances in agriculture and food manufacturing have fed billions and boosted global trade, much of the economic gains have been won at the expense of public health, the environment, animal welfare, biodiversity and social equality^{2,3}. The structural weaknesses inherent in our food system became even more acute during the COVID-19 pandemic, as the fragility of our local and global supply chains was exposed⁴.

Despite the urgent need to transform our global food system, governments and public institutions persist in following a well-trodden and ill-fated path⁵. Progress towards transformational food policies remains elusive due to a lack of political ambition and creativity, and a failure to work in partnerships. Policymakers have consistently prioritised quick wins and isolated solutions, rather than considering how our food system both impacts and depends on multiple public health, social, environmental and economic outcomes. They generally show little awareness of the unintended consequences of decisions made across different policy areas and how these negatively impact on our food system. For example, the recently published proposals for food systems and policy transformation in England and Wales (the Dimpleby Report) failed to provide a clear roadmap for how stronger connections can be made between national and local government and relevant public authorities⁶.

This is compounded by unequal stakeholder representation and power imbalances at the policy table, as demonstrated by the failure of the 2021 UN Food System Summit to provide a meaningful space for civil society's participation⁷.

From our detailed analysis, nine core themes emerged that capture the interconnecting challenges facing our food system:

1. **Public Health and Wellbeing**
2. **Climate and Nature**
3. **Farming and Fishing**
4. **Animal and Fish Wellbeing**
5. **Food Markets and Businesses**
6. **Food Sector Workers**
7. **Food Access and Affordability**
8. **Public Food**
9. **Food Environments and Culture**



Poor diets contribute to 4 of the top 5 risk factors for early death, ill health and disability in Scotland.

Diet-related illness

Poor diets place a huge burden on public services and society⁸. They account for the largest proportion of food's hidden costs, ahead of the damage caused to nature⁹. In the last 20 years, progress has stalled towards reaching the Scottish Dietary Goals. In 2020, the average adult Scottish diet was 40% above the recommended daily energy intake, too high in calories, fats, sugar and salt, and too low in fruits, vegetables, oil rich fish and fibre¹⁰. Discretionary foods, defined by Food Standards Scotland (FSS) as confectionary, sweet biscuits, savoury snacks, cakes, pastries, puddings and sugar-containing soft drinks, are a particular problem, as almost all adults and children in Scotland consume them to excess. On average, these snacks and treats account for 20% of peoples' total daily calorie and fat (including saturated fat) intake, and over half of the daily consumption of added sugars¹¹. Worryingly, fruit and vegetable consumption in Scotland remains stubbornly low, with only 22% of adults (16+) and 14% of children meeting their daily recommended intake of five portions a day¹². Food in the UK has become more processed since World War Two, with over half of current UK energy intake coming from ultra-processed foods (linked to obesity, cancer and cardiovascular diseases)¹³, and households spending an estimated £10 billion per year on takeaway foods high in calories, saturated fat and salt¹⁴.

In Scotland, excessive calorie intake is leading to higher obesity rates, lower healthy life expectancy and increasing health inequalities. Obesity and excess weight are factors in diabetes, cancer, heart disease and strokes, as well as mental ill health and reduced life expectancy. In the latest Scottish Health survey, 67% of adults (2020) and 30% of children (2019) were classified as overweight or obese¹⁵. Despite multiple political interventions and public investment, these rates and related health inequalities have either not changed or worsened. Obesity rates are consistently higher in Scotland's most deprived areas (for all adults and children), with the gap (22%) particularly pronounced for women, varying from 40% in the most deprived to 18% in the least deprived areas¹².

This deprivation divide in Scotland is also evident in life expectancy, which varies by 25.1 (male) and 21.5 (female) years respectively¹⁶.

Furthermore, excess weight increases the risk of serious illness or death from COVID-19. During the recent 2020 lockdowns 39% of Scottish adults reported an increase in their weight¹⁷. The cost of treating dietary-related conditions associated with being overweight and obese is immense and leads to lost productivity costing the country an estimated £4.6 billion annually¹⁵. Recent evidence strongly shows that dietary change, especially reducing meat consumption, can deliver substantial health benefits and reduce diet-related health costs^{18,19}.



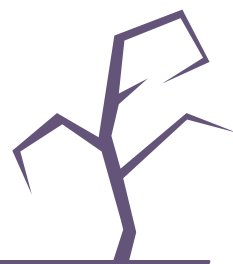
While over-consumption is Scotland's biggest dietary-related public health issue, rising levels of malnutrition is also a concern. The World Health Organisation (WHO) defines malnutrition as deficiencies, excesses, or imbalances in a person's intake of energy or nutrients. In 2015, at least 265,000 Scottish people were estimated by the British Dietetic Association to be at risk of malnutrition, costing £2 billion in health and social care. This rate continues to rise (up 8% by 2019) and is expected to increase by 40% by 2040²⁰. According to current estimates from the Scottish Charity Food Train, at least 103,000 older Scottish people (65+) are currently at risk of, or suffering from, malnutrition²¹. People who are malnourished are more likely to visit their GP, be admitted to hospital and often live with other health issues²². While the causes of malnutrition are complex, they include poverty, food access challenges, social isolation, and limited mobility²³.

Climate and nature crisis

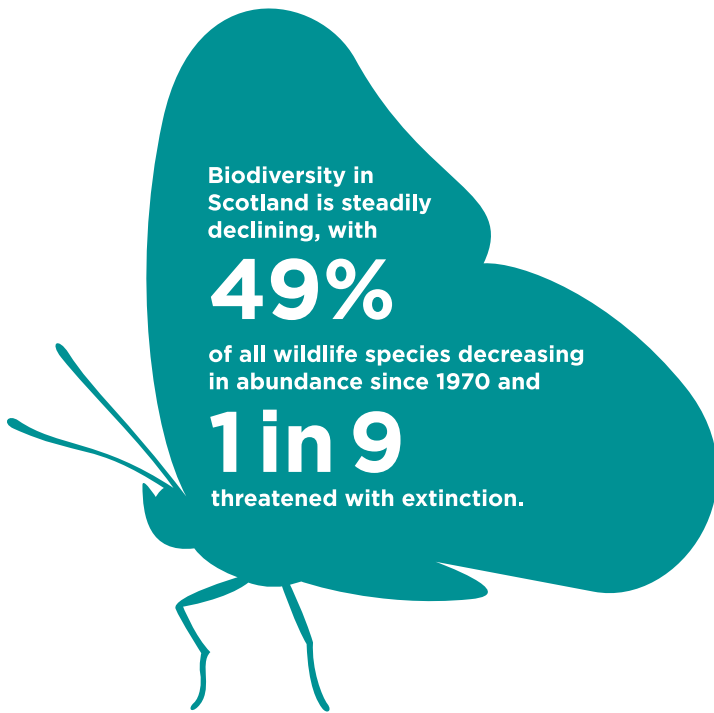
If we do not change the current trends in our global food systems, we cannot meet the Paris climate change agreement objective of limiting global warming to 1.5°C²⁴. In a recent progress report, the UK Climate Change Committee clearly warned Scotland's Parliament and Government that their progress towards climate change targets had stalled, and urgent improvements in monitoring and evaluation were needed²⁵. They argued that there is no credible plan to adapt farmland habitats and species to a changing climate, despite 73% of Scotland's land area being farmland²⁶ and Scottish agriculture accounting for 18% of Scotland's total carbon emissions²⁷. The current Scottish Climate Action Plan demands a 31% reduction in agricultural-related carbon emissions by 2032, but little has been achieved to date²⁸. According to the recent Farming for 1.5 report, on-farm greenhouse gas emissions need to be cut by 55% by 2045 (from 2018 baseline), if Scotland is to have any chance of meeting its net zero targets. This is against the background of emissions not falling for the last ten years²⁷.

Furthermore, while the net zero target is welcomed, experts are concerned that a myopic focus on carbon equivalents may hinder specific on-farm actions targeting other important farming-related gases such as methane or nitrous oxides, and nitrogen uses²⁹. This is especially problematic given that agriculture accounts for 90% of Scotland's ammonia emissions and 60% of nitrate pollution in UK water bodies³⁰.

The use of pesticides, fertilisers and imported animal feedstocks characterises the intensive, industrialised agricultural model, including Scotland's. These are damaging in terms of carbon emissions, as well as to soil and water quality, and carbon storage. The environmental and financial cost of soil erosion alone, through the loss of valuable nutrients and pollution, is estimated at £50 million per year in Scotland³¹.



The cost of soil erosion in Scotland is estimated at
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 through pollution and the loss of valuable nutrients.



In parallel, biodiversity has been steadily declining³², with Scotland ranked 212 out of 240 countries in the most recent Biodiversity Intactness Index (BII), a global analysis of human activities' impact on nature. With a BII score of 56%, Scotland compares very unfavourably with other European countries such as Norway (75%) and Finland (89%)³³. Our degraded natural resources extend into our seas, which are six times larger than Scotland's land mass. Sea levels around Scotland are rising between 10-30mm per decade^{26,34}. Warmer sea temperatures are affecting plankton distribution, negatively impacting fish and other marine animals including seabirds, who rely on it for food. The average number of breeding seabirds in Scotland dropped by 49% between 1986 and 2019³⁵. While our seas face many complex challenges, fishing is the most impactful³⁶ and while some fish stocks are showing signs of recovery, unsustainable fishing practices persist^{37,38}.

Waste, specifically food waste and plastic packaging, is another critical environmental impact of our food system. This is generated across the entire food and drink chain, including household consumption. Globally, the Food and Agricultural Organisation (FAO) estimates that 1.6 billion tonnes of food waste are generated annually, with more than 80% (1.3 billion tonnes) classified as edible.

This means that approximately 1/3 of all food produced for human consumption is thrown away. In terms of CO2 emissions, if food waste was a country, it would be the third highest carbon emitter in the world behind the USA and China³⁹. A recent report estimated that the total demand for plastic in Europe continues to rise by about 2% per year (approx. 20.5 billion kilos/year) with an estimated 8.2 billion kilos/year of this used for food and drink packaging, a weight equivalent to more than 8 million cars⁴⁰.

In 2013 Zero Waste Scotland estimated that Scotland generated around 1 million tonnes of food and drink waste, and this is the baseline for the on-going food waste production targets. This was made up of solid and liquid waste from households, and solid waste from commercial and industrial sectors, including the public sector⁴¹. This figure does not include food losses incurred in primary production, which are cautiously estimated at an additional 140,000-270,000 tonnes per year, nor does it account for commercial drink waste. Commercial and industrial waste represents around 40%, with the remaining 60% attributed to household consumption, of which 60% is considered avoidable (i.e. food that could have been eaten if managed differently to and in the home). Avoidable waste is estimated to account for 1.5 million tonnes of CO2-equivalent emissions, costing £1.1 billion a year or £470 per household⁴².

When food is wasted, the losses are not just economic. The energy, water, land and carbon used to grow, harvest, transport and prepare the food are also lost. In response, the Scottish Government's Making Things Last strategy (2016) set an ambitious new target to reduce food waste per capita by 33% (from 2013 levels) by 2025⁴³. This target was the first of its kind in Europe, recognising that reducing food waste is critical in fighting climate change and moving to a resource-efficient economy. While technological developments in waste collection and processing, and associated subsidies and legislation are welcomed, it can also lead to unintended consequences. For instance, commercially-managed edible food surpluses are being diverted to anaerobic digestion or animal feed instead of being consumed⁴⁴.

The impact of Scotland's food system on nature and the climate is also felt beyond our borders through our high levels of food and drink imports. Based on farm gate value, 46% of food consumed in the UK in 2020 was produced overseas, with 61% of this imported food coming from the EU⁴⁵. International trade and global food and feed supply chains have negative extraterritorial impacts and the export of products such as palm oil, soy and beef collectively are globally the biggest drivers of deforestation in the countries in which they are produced⁴⁶. The global food system is estimated to be responsible for 34% of total global greenhouse gas emissions (both CO₂ emissions from fossil fuels, as well as land-based emissions) with 71% attributed to agriculture and land-use, 21% to food supply chain and consumption-related activities including industrial processing, packaging, transport, retail and 8% to food waste⁴⁷.

Besides farm mitigation, others argue that dietary shifts, and in particular reducing meat consumption, could help us reach net zero, contributing as much as a fifth of the necessary mitigation needed to meet the Paris target of limiting global warming to well below 2°C⁴⁸.

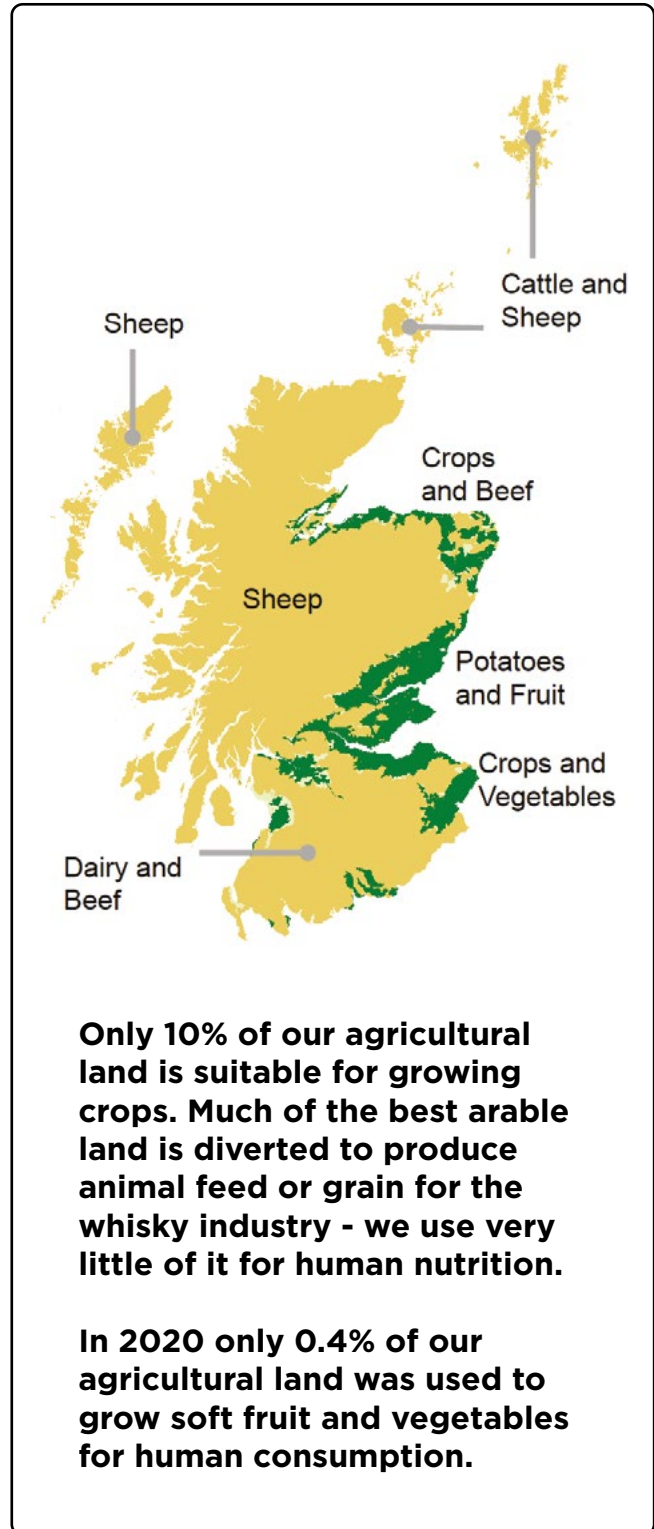


Avoidable waste is estimated to account for 1.5 million tonnes of CO₂-equivalent emissions, and costs us £1.1 billion a year or £470 per household.

Unsustainable farming and fishing

Scotland is 98% rural and most of this land is devoted to agriculture. However, the best arable land is largely used to produce animal feed or grain for the alcohol industry, rather than food for human consumption⁴⁹. In 2020, the total area used to grow cereals and oilseeds was dominated by barley and wheat (85%), while vegetables and soft fruit production only represented 0.4%⁵⁰. Scotland holds more than 50% of the UK's soil carbon and the government's efforts at restoring the country's peatlands, which emit vast amounts of carbon dioxide, is a further pressure on land, along with forestry, re-wilding projects, housing and other activities⁵¹. Concerns around access to land for growing food are not limited to rural areas, as urban growing spaces remain a very low priority in many local development plans and planning strategies, despite statutory obligations to provide land for allotments and community growing projects⁵².

Unequal land ownership in Scotland, with vast swathes concentrated in a few hands, is another issue. The Scottish Land Commission reported in 2019 that 432 landowners owned 50% of private rural land in Scotland⁵³. Such inequality is undesirable because it distorts investment decisions as land is traded and used for profit rather than productive farming⁵⁴. Land and water access are also critical barriers for new entrants into agriculture, and closely related to long-term familial occupancy and succession issues⁵⁵. More generally, existing land and water management practices and regulations do not match the complexity of Scotland's geography and land and water uses, and are not delivering the best social, economic and environmental outcomes⁵⁶.



The current system of agricultural subsidies, the Common Agricultural Policy (CAP), still prioritises productivity over schemes promoting biodiversity enhancement, climate change mitigation, clean air and enhanced animal welfare, known as ‘public goods’. Furthermore, some subsidies benefit non-farming landowners such as grouse moor owners, and most place little or no obligations around sustainability and stewardship practices⁵⁴. Agricultural support, including the CAP, is not always accessible to small producers due to the size or nature of their operations. A subsidies’ system primarily focused on rewarding land ownership and production at a large scale has meant that less intensive farming systems, such as crofting and community supported agriculture, struggle to survive and thrive, despite often being better for nature and playing a vital role in more sustainable land management⁵⁷. Smaller scale production also plays a crucial role in the culture and economic and social sustainability of Scottish rural and island communities. Scotland’s natural resources’ management extends to our rivers, lakes, coastlines and seas. Here too, fishing and aquaculture compete with other economic activities, such as oil and gas extraction, tourism, and the development of offshore renewable energy. Scottish seas face growing pressure from climate change, particularly rising temperature and sea levels, and acidification. Marine habitats’ importance for carbon sequestration and storage is also becoming increasingly evident. Managing these competing demands for sea space is a key Scottish challenge. The impact of human activities needs to be reduced, while balancing productivity and the economy. Existing measures such as quotas, licensing, and Marine Protected Areas, are insufficient. These will need to change as our knowledge of the marine environment increases. Fishing, especially methods involving dredging, is the human activity causing the greatest

pressure over the widest area, affecting at least 15% of the seabed in most areas, while stocks in cod and herring continue to decline³⁶. Protection Areas do not adequately address the problem⁵⁸.

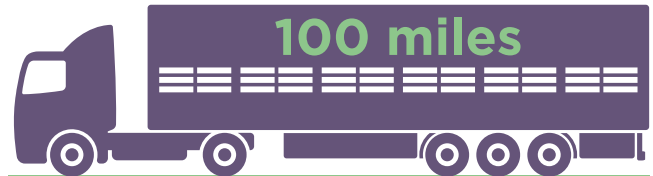


As well as environmental challenges, the fishing industry also faces significant economic ones due to the UK leaving the European Union (EU). Exit negotiations were handled by the UK Government with limited involvement from the Scottish Government, despite Scotland accounting for 61% of the UK’s fishing and aquaculture related economic output in 2018⁵⁹. Compounding the short-term consequences of Brexit on market accessibility, Scotland’s fisheries are constrained by devolution-related issues, as the Scottish Government’s own policies, rather than the Common Fisheries Policy, are now acknowledged to be driving many of the sector’s difficulties⁶⁰.

Poor animal and fish welfare

In 2020, Scotland had approximately 23 million farm animals across the country's four main livestock species: poultry (62%), sheep (29%), cattle (7%), and pigs (2%). There were also 14,000 farmed deer and 5,000 beehives⁵⁰. Cattle numbers have steadily declined over the last 60 years due to increased costs in feed, veterinary care and housing, and changes to the subsidies' system. Pig, sheep and poultry numbers have remained steady over the last decade. Production has intensified in Scottish livestock farms in the last 50 years, just as it has globally. However, there is little data confirming the numbers of animals produced under intensive conditions. Compassion in World Farming's 2017 UK Farming Mapping Exercise estimates that there are around 9.3 million indoor reared livestock in Scotland (excluding the Highlands and Islands where no data was available), with most being egg-laying hens⁶¹. This means that at least 40% of Scottish livestock are reared indoors. Aquaculture is another intensive Scottish industry with over 100 million ova of all combined species laid to hatch in Scottish fish farms in 2020⁶².

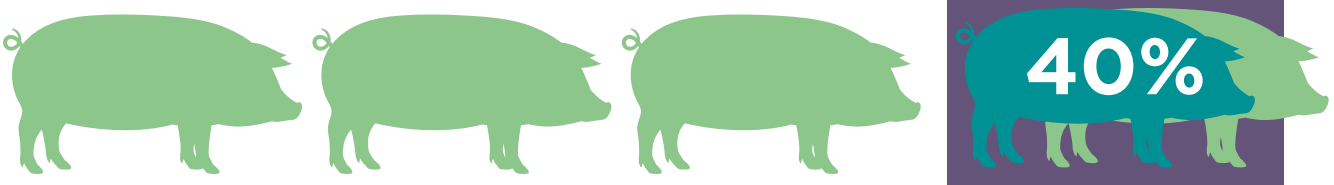
Animal welfare remains a deep concern, with common problems being inadequate nutrition, lameness, chronic health issues, poor housing, social stress, restriction of highly motivated behaviours, unmet psychological needs and stressful transport⁶³.



Farm animals, in some regions, are being transported up to 100 miles (including by ferry) for slaughter.

The main concerns in production practices are the use of cages for gamebirds and laying hens, as well as farrowing crates for pigs, and individual calf pens. There is also poor practice in aquaculture, with a recent investigation on salmon farms uncovering widespread failure to adhere to welfare standards⁶⁴. While progress to enhance Scottish welfare standards has been limited, the 2021/22 programme for government committed to consulting on new animal transport legislation, phasing out cages for gamebirds and laying hens, and farrowing crates for pigs^{65,66}. In addition, many Scottish farmers have signed up to voluntary measures, often driven or funded by industry or supermarket schemes. However, it is feared that Brexit and future trade agreements negotiated by the UK government are likely to jeopardise domestic Scottish welfare standards and product quality⁶⁷.

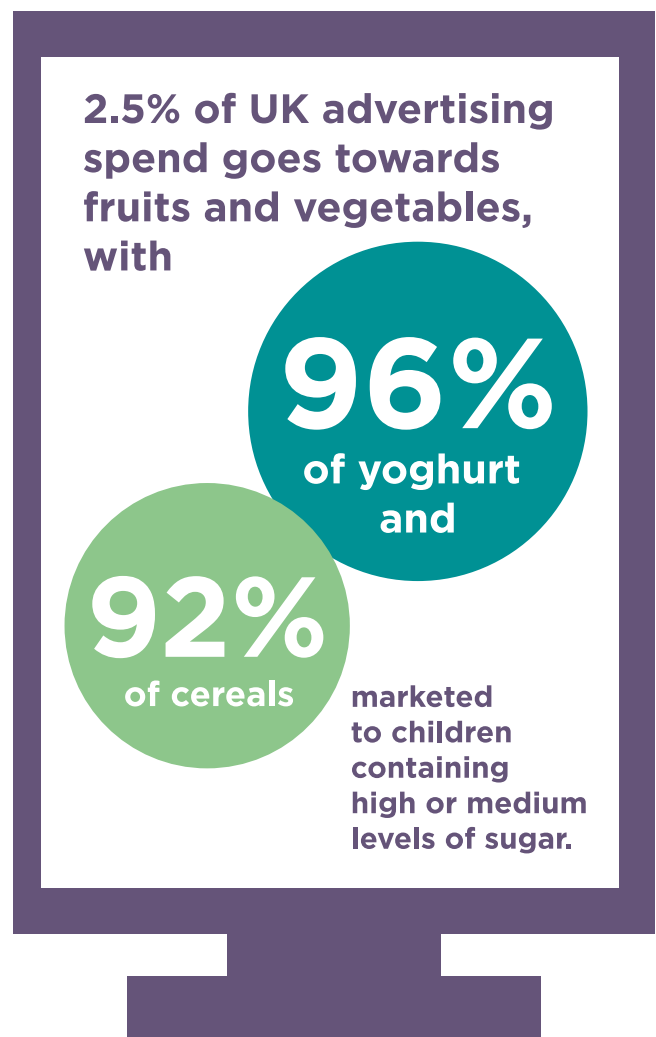
As a result of intensification over the past 50 years, an estimated 40% of Scottish livestock are now being reared indoors, which is the cause of many welfare concerns.



Extractive supply chains

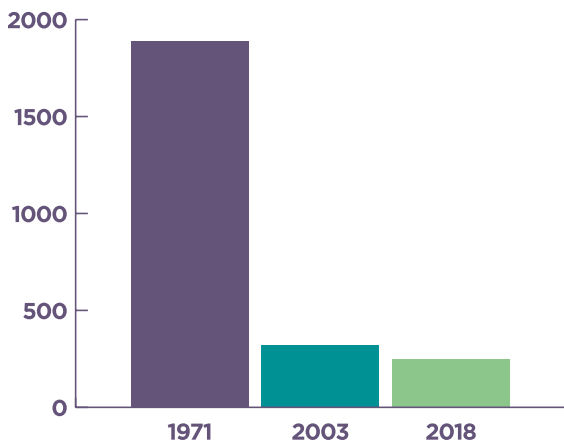
The agri-food sector plays a major role in the UK economy, contributing 9.8% (roughly £129 billion) of national Gross Value Added in 2019⁴⁵. The sector is particularly important to Scotland: Scottish food and drink businesses account for 10% of all UK food and drink businesses and 25% of all UK food and drink exports. It is the largest Scottish manufacturing sector, contributing 31% of all Scottish manufacturing activity⁶⁸. However, the sector has been severely impacted by Brexit, the COVID-19, and rising inputs and fuel costs. Scottish food and drink exports fell on average by 7% between 2020 and 2021, with whisky and salmon alone experiencing a 16.2% drop⁶⁹. Imports were also impacted, with the quantity and value of products imported into the UK for seven of the top 10 food and drink categories (including chicken, pork and cheese) dropping between 2019 and 2020⁷⁰. On top of this, Brexit is having a direct, negative impact on jobs, as reduced tariffs are leading to UK processing plants shedding jobs due to increased trading costs with the EU⁷¹. While this may be limited to the manufacturing sector, other challenges are affecting the whole food and drink supply chain. In particular, there are fewer essential migrant, seasonal and skilled workers in critical areas, such as hospitality, logistics, public food, meat processing, meat and food safety inspection and veterinary services, and horticulture^{72,73}.

Compounding these immediate challenges is the very structure of our food and drink system. Intensification and specialisation, through increased reliance on fertilisers, pesticides, machinery, and imported feed has been successful in producing cheap food and helping fuel economic growth, but this strategy has exacerbated a range of problems. Food products that are high in fat, salt and sugars are often more profitable than healthy food and drink, due to economies of scale, longer shelf-life, their capacity to be stored in bulk and their perceived attractiveness¹³. They therefore tend to be more heavily advertised despite their known impact on health⁷⁴.



Technology is considered the ultimate fix for obstacles to production under the cheap food paradigm, especially in agriculture. Consequently, agroecological and nature-friendly farming have been framed as riskier to business, and incapable of meeting demand, harder work and less deserving of government support. This has led to a loss of traditional knowledge and skills, fewer operating farms, overreliance on inputs, inhumane production practices and the locking of producers into high-cost intensive systems with limited control over automation and data⁷⁵.

The free market has also driven the food industry to become dominated by an ever-smaller pool of major players, with the UK market currently dominated by 10 retailers, five manufacturers, two contract caterers and a small number of US-based multinational fastfood companies⁷⁶.



Between 2008 and 2018, more than 33% of small UK abattoirs have closed and decreased from 1890 in 1971 to 320 in 2003, and to 249 in 2018.

In May 2020, a FSS survey found that 25% of Scottish adults were worried about affording food in the next month. The situation is worsening with rising transport, fuel and food costs.

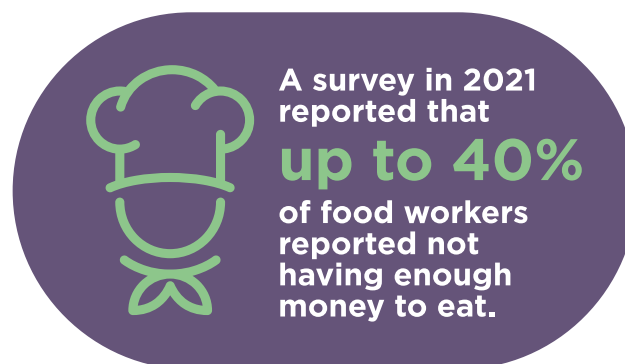
The big four food retailers, Tesco, Sainsbury's, Asda and Morrisons, have 67.8% (as of January 2022) of the grocery market share, although there have been signs of growth in alternative food networks, including independent retailers during COVID-19⁷⁷. Interestingly, organic food and drink sales in Scotland and the rest of the UK have surged recently, driven mainly by the growth in online and home deliveries during COVID-19⁷⁸. Finally, the growth of the Scottish food sector remains limited by processing infrastructure constraints. In 2018 the Sustainable Food Trust reported that since 2008 more than a third of small abattoirs have closed across the UK⁷⁹. This trend is mirrored in Scotland where in 2019 only 24 red meat abattoirs were registered, with associated losses in similar essential food processing infrastructure, including butcheries⁸⁰.

Undervalued food sector workers

The food and drink industry is one of Scotland's most important economic sectors, but data on total employment across the food chain from production to food service, is limited. According to Scotland Food and Drink, an estimated 120,000 people are employed in agrifood and drink production and manufacturing⁸¹. This does not account for the many people employed outside manufacturing, in wholesaling, distribution and transport, retailing and other food service roles such as catering. Taking into account the food service workforce alone, this figure grows to upwards of 250,000⁸². Yet, the median weekly full-time earnings across the sector in production and manufacturing roles only, is 3% lower than the Scottish average⁸³. When food service and retail are included, up to 25% of workers are estimated to earn the minimum wage or below, compared with 11% across the whole economy⁷⁴.

In addition, COVID-19 has had a disproportionate impact on the earnings of food service staff, especially waiters who are also affected by the government's still-unfulfilled promise of introducing fair tips legislation⁸⁴. Despite their critical role in feeding the nation, many food workers feel that the public does not recognise their importance and value. Worse, a 2021 survey highlighted that up to 40% of food workers reported not having enough money to adequately feed themselves⁸⁵. Food industry facilities, especially meat and poultry processing, were also COVID-19 transmission hotspots, raising concerns about the health and safety of production line models and the demands for them to increase efficiency⁸⁶.

While some consumption patterns are shifting towards healthier, more sustainable food and drink, competitive pressures have led many agri-food processors to aggressively cut costs and engage in



mergers and acquisitions. Robust global certification schemes can improve income and working conditions for smallholder farmers and food industry workers, but fundamentally, more is required to ensure workers and farmers basic rights are properly protected across the global food supply chain. Yet, at the same time, growing inequalities, higher food and energy prices, rising inflation rates, increases in food insecurity, and squeezed public service funding, are driving calls for more cheap food, reinforcing retail buying power and placing increasing pressures on producers⁸⁷.

Like the rest of the UK, much of Scotland's farming and food processing sector heavily relies on migrant labour, who suffer disproportionately from increased risks of human trafficking, with very few mechanisms for workers to voice their concerns⁸⁸. Workers across the global food and drink chain (including in Scotland) are treated unequally, with many suffering from poor wages, lack of job security, few career prospects and limited chances for developing their professional skills. In farming for example, new entrants face significant and often insurmountable start-up costs, challenges accessing and acquiring land, a lack of business support and skills development opportunities, and slim and variable profit margins that make loans unaffordable and make it difficult to earn a living wage⁸⁹.

Food insecurity

The Scottish Health Survey reported that in Aug/Sept 2020, 8% of households interviewed were worried they would run out of food, and/or had eaten less and/or ran out of food in the previous 12 months. Most worryingly, 2% reported that they had ran out of food due to lack of money or other resources, with younger adults and single parents more likely to be affected. These figures are likely an underestimation given the sensitivity of the questions and changes in the sample size and methodology used due to COVID-19¹⁵. Scotland has made no progress in alleviating household food insecurity since 2017, when it was first officially measured at a national level⁹⁰. This mirrors the lack of improvement in the number of Scottish households estimated to be living in relative poverty⁹¹. Food insecurity is also linked to wider social inequalities and poverty, particularly recent austerity measures and social welfare cuts and restrictions. The key reasons why people are referred to food banks are that they have extremely low incomes due to insufficient benefits, they are paid too little, and/or their work is insecure⁹². Food insecurity considerably damages people's physical health, and their psychological and social wellbeing⁹³. People with disabilities, ill health and/or caring responsibilities are particularly vulnerable to food insecurity, which can make their specific situations more difficult to manage⁹⁴.

The COVID-19 emergency support measures set out by the UK Government, including furlough and the temporary increase in the Universal Credit allowance, protected some people in the short-term from being swept into destitution, but left many stranded as the May 2020 Food Standard Scotland survey reported. Many of those affected were also unable to access help due to lack of awareness, embarrassment, and stigma⁹⁵. The Trussell Trust, the primary food bank provider in Scotland and the rest of the UK, paints a very stark picture of COVID-19's impact. In the immediate aftermath of the first lockdown in March 2020, there was a sustained surge in emergency food aid with

an 89% increase in demand between April 2019 and the same month in 2020. They estimated that the number of people in the UK being supported by universal credit doubled from three to six million between March 2020 and March 2021. The Trussell Trust alone gave out approximately 2.5 million emergency food packs between April 2020 and March 2021, a 33% rise on the previous year. The Trussell Trust in Scotland saw a 47% increase in the number of emergency food parcels issued between April 2020 and March 2021⁹⁶.

New independent community-led initiatives popped up across Scotland to provide additional short-term relief. These included new food banks, local council-led initiatives and other community organisations such as churches, football teams and mutual aid groups, some set up with support from the Scottish Government's Food Fund. The Scottish Government also increased the Scottish Welfare Fund and extended the free school meals during holidays, and to all primary school children from August 2022. However, the flexibility and funding for such policies remains constrained, as not all social security powers are devolved. Furthermore, the Scottish Welfare Fund experienced a 31% increase in crisis grant applications between Feb 20 and Jan 21 and saw a 52% increase in the average amount awarded⁹⁷. While the Poverty and Inequality Commission commended these efforts and those of local authorities, they also expressed concerns over the lack of a coordinated response and leadership at the national level, inadequate support for community organisations tackling food insecurity and the long-term viability of existing measures^{98,99}. New challenges emerged during the pandemic, with many food aid services being negatively affected and having to redesign their delivery models due to travel restrictions, loss of volunteers to shielding, increased requirements for, and reliance on, digital solutions, suspension of some services and an increased use of surplus food with some no longer compatible with dignified access¹⁰⁰.

Costs-driven public food

Public procurement - the process through which public bodies purchase goods and services, including food and catering - is increasingly recognised and used as a tool to address the challenges of our unsustainable food system¹⁰¹. Governments are using public procurement to boost rural economies; increase support for small and medium-sized enterprises; enhance nutritional intake; increase fresh food consumption (including of fruit and vegetables); reduce food's environmental impact; address food insecurity; promote more responsible and ethical business conduct; tackle gender inequality; invest in education, skills and development; promote innovation in public service delivery; and strengthen local and national food cultures^{102,103,104,105,106,107}.

Specifically, public food has the market power to impact supply and demand, drive product reformulation, and thereby help achieve the multiple food system goals listed above. Across the UK, the public sector spends an estimated £2.4 billion a year¹⁰⁸ on food and catering services for public bodies and authorities, including schools, universities and colleges, hospitals, care homes and prisons¹⁰⁹. Approximately £1 billion is spent directly on food and ingredients. In Scotland, more than £130 million/year is spent on public food procurement. This is increasing year on year due to recent changes to school meal provision (including early years) and the ongoing roll-out of universal free school meals (including a new universal breakfast and milk provision) to all primary school children¹¹⁰.

Since 2016, Scottish local authorities with support from Scotland Excel, the Scottish Centre for Procurement Expertise, have increased their spending with Scottish food and drink businesses by nearly 80%, from £8.8m to £15.8m¹¹⁰. This has helped to support Scottish businesses and reduce the food miles associated with the Scottish public food service. With the publication of the Scottish Catering for Change policy in 2011, and the introduction of the Procurement Reform (Scotland) Act 2014¹¹¹, the foundations were laid for a stronger, more systemic approach to public food procurement which prioritises local suppliers and considers social, economic, and environmental factors. Building on this, both in Scotland and beyond, national, regional and local governments are driving forward systemic change, using framework style legislation and policy mechanisms which demand that local authorities transform their public food procurement and catering services to deliver the multiple public health, environmental, social and economic benefits they can bring¹¹².



Unhealthy food environments

Food environments are where people interact with the wider food system to acquire and consume food. They can be conceptualised around two principal domains. The first is the external domain, characterised by the four dimensions of availability, food prices, vendor and product properties, and marketing and regulation. The second is the personal domain, which is shaped by accessibility, affordability, convenience and desirability. The interaction between these two domains shapes individual and household food practices and health outcomes (e.g. what and how much we eat, the shops we use and have access to, the cost of buying food locally)¹¹³. The food environment is therefore impacting what, and how much, we eat, through the retail stores available, the cost of buying food locally, the choice of product (including fresh fruit and vegetables) among other things¹¹⁴. Food retail has rapidly evolved in terms of outlet type, concentration and density, but also through online and mobile applications, delivery services and the growth in out-of-home consumption¹¹⁵. Yet, the increased availability of food can also have negative consequences: a recent UK study found that those with greater overall access to food through work, community, home and takeaways were nearly twice as likely to be obese¹¹⁶. Furthermore, some neighbourhoods remain excluded due to geographical and/or socioeconomic constraints, and despite the growth in food choice and availability, 16% of UK households are estimated to live in food deserts. There the choice of food stores, and the product ranges available, are often limited to small convenience stores and clusters of unhealthy takeaways with limited product ranges at comparatively high prices. Access to fresh food is difficult or non-existent. Many food deserts are in deprived areas where people on restricted incomes, with disabilities, mobility issues, and/or without transport, struggle to access and afford healthy food^{117,118}.

Despite multiple interventions, in Scotland and elsewhere, there is a clear evidence gap on how food environment policies impact inequalities and associated poor dietary health outcomes¹¹⁹.



It is now widely accepted that our local food environments significantly influence how active and healthy our lifestyles are, and play a major role in tackling obesity^{114,120}. There are growing calls for more market and regulatory interventions to transform our local environments into healthy spaces that promote healthy food and more active lifestyles^{121,122,123}. Our local food environments are vital in shaping local food culture. Vibrant networks, initiatives, and organisations (including allotments and community gardens) across Scotland, are regenerating derelict and under-used public land, developing social enterprises, and delivering health and social care. They are thereby tangibly reducing social isolation, improving physical and mental wellbeing, enhancing biodiversity, creating spaces for local retail and teaching valuable practical food growing, cooking and life skills^{124,125,126,127}.

Chapter 2: Why we need framework legislation

The scale and nature of the challenge is clear. As we have carefully outlined, it is not a single issue, but a complex patchwork of interconnecting ones. These involve disparate stakeholder interests, multiple, and often competing, governmental portfolios and policies, and an inequitable support and subsidy system. All this has made finding common ground, and negotiating an agreed purpose and direction of travel, elusive. There is general political agreement on the urgent need to transform the Scottish food system. There is not consensus though, on how to achieve it. But as we document in the next chapter, we have learned of many individual examples of good practice. These can provide models which can be built on, and as such should be supported.

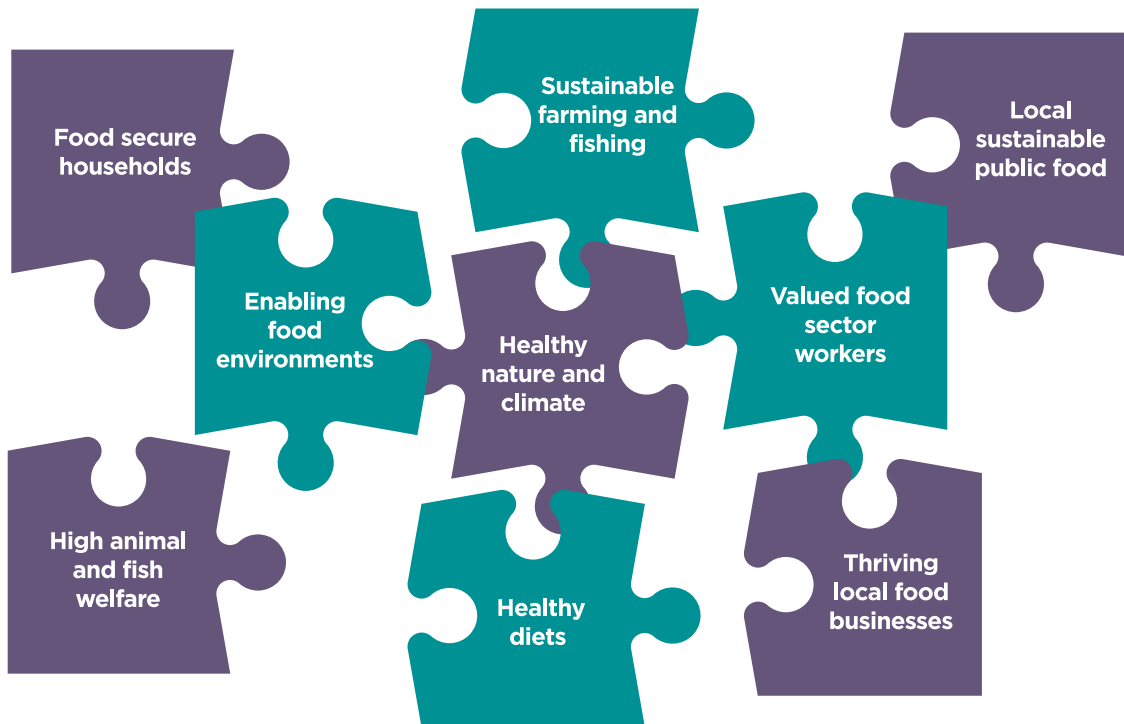
However, there remains a lack of cohesion and partnerships among those with the power to effect systemic change. Primarily this means national and local government, ministerial portfolios, civil service directorates, public bodies, the agri-food and drink sector (trade unions, allied sectors (including tourism, health and social care, and education), the third sector (including community initiatives) and wider civil society. The result is decades of disjointed and ineffective food policy. The price for this has been an unacceptable lack of progress towards improving dietary-related public health outcomes, reducing agriculture and food's environmental impact, developing domestic agri-food infrastructure, supply chains and markets, eliminating food insecurity, and reaping the wider social benefits delivered by more vibrant and equitable local food economies.

According to the Scottish Government, a framework legislation creates a governance structure around a particular topic in law¹²⁸. The need to create such an overarching arrangement around food is irrefutable. It can embed an integrated food systems approach into Scottish food policy and legislation. This ground-breaking framework legislation must hold in dynamic balance the array of challenges, interests and institutional structures that are central to, and impacted by, our food system. It must provide clarity of purpose and an agreed direction of travel for all. It needs to respect, make space for, and hold together the different voices, lived experiences, commercial and other interests and geographical contexts at play. It must recognise that at many junctures difficult and often contentious trade-offs may have to be made in the pursuit of a healthier, fairer, and more sustainable Scottish food system for all.

The framework must use all available tools to foster greater understanding and collaboration as well as stronger partnerships, among all stakeholders. It must support a just transition to Scotland's new food landscape. To succeed, it must harness the power, resources, expertise and passion of the entire nation.



Chapter 3: Better is...



Healthy diets

We envision a Scotland which recognises that food is the foundation of our physical and mental health, and general wellbeing. A nation where everybody regardless of age, personal circumstance, background or geographical location has access to planet-friendly, healthy diets which meet their nutritional needs. Every child has an equal healthy life expectancy, irrespective of their postcode. Scotland legislates for, and builds, healthy food environments that promote good food choices. There are regulatory measures on food businesses that ensure accessibility and affordability of essential healthy foods and discourage unhealthy foods. Community gardens and food enterprises, including food cooperatives are supported. Space is provided for regular and affordable farmers markets. Regulatory interventions are used, where required, to ensure that food industry is taking the steps to ensure our food is healthier, more sustainable, accessible, and affordable to all.

Local authorities and public bodies produce their own food plans, which consider how food can improve public health, the environment, education, social and economic wellbeing, and economic development. Knowledge and skills in cooking and making healthy food choices have improved across all age groups. The fair work principles – including paying the Real Living Wage as a minimum, union recognition and extending collective bargaining – are implemented everywhere. There are free school meals for all ages and investment in early intervention. Cultural, religious, and other individual dietary requirements are met. Rates of non-communicable diseases, particularly obesity, are significantly reduced. Malnutrition, undernutrition, food insecurity and social isolation are rare.

Healthy nature and climate

This is a Scotland rich in nature, with healthy lakes, rivers, seas, soils and thriving biodiversity. A country where strong public leadership encourages the farming and fishing sectors to meet our nature and climate targets. Wide-ranging initiatives promote agroecological and nature-friendly farming and fishing (including agroforestry and conservation grazing/fishing). Farmers, crofters, growers and fisherfolk are supported to upskill so that their work can become nature- and climate- friendly. This support is backed by a substantial increase in funding for research, monitoring, advice and education.

Foods' environmental impacts are widely understood. Producers monitor their influence on nature through an integrated national inventory grounded in scientific evidence. At consumer level, this is achieved through clear labelling, better food education including in formal schools, Further and Higher education curricula, and by promoting nature- and climate friendly food products that support people to make better choices. More sustainable food choices are routinely available and mainstreamed, especially in public kitchens.

Justice, equity and sustainable development are at the heart of our trade structures. Policies challenge larger food businesses to take the lead in delivering healthy food at affordable prices, and to use their supply chains to end deforestation, support habitat conservation, promote sustainable food production and consumption, and drive more equitable land use. Small sustainable food producers are championed at home and around the world. We work in partnership with those worst impacted by our unstable climate.

Sustainable farming and fishing

We see a Scotland where policies are based on the concept of 'public money for public goods'. Sustainable agricultural production, including agroecology and organics, sustainable fishing and other regenerative methods that protect nature and restore biodiversity, promote better animal welfare, and mitigate climate change, are supported. Farms practising sustainable agriculture are given financial incentives, business and infrastructure support, education and training. The amount of sustainably cultivated land expands.

Food producers and fisherfolk are valued. They can work with dignity to earn a good living and have adequate access to local, healthy food, fuel and housing. Land is accessible and affordable for young people and others who want to start producing, processing or retailing food. Food producers can more easily directly connect with their customers with as much money as possible being spent, and retained, in local communities, helping to grow local food businesses, create jobs and regenerate local economies.

On land, collectively-owned community food enterprises managed by committees of local people vastly increase. Pasture-fed livestock is commonplace and celebrated as a sustainable way to convert green plant material inedible to humans into nutrient-dense meat and dairy. This also reduces reliance on artificial fertilisers and animal feed. In the seas, we have healthy marine environments with restored fish stocks. Harmful fishing methods such as dredging, that damage the environment, harm and deplete fishing stocks, are monitored and policed. The catch is regulated at sustainable levels and fishing folk provide healthy, low carbon protein to many more people from across society and throughout Scotland.

High animal and fish welfare

This means a Scotland where fewer animals are bred for food and those who are, including farmed fish, are treated as sentient beings whose needs, wants and well-being are fully respected. High welfare standards are required for newly established farms and boats, and higher welfare and husbandry standards have been implemented across all existing agricultural production businesses. Routine antibiotic use is banned. Animals have living spaces allowing them to feel comfortable, safe, and fulfilled in species-appropriate complex environments. Infants are allowed to stay with their mothers. Animals are bred to maximise their wellbeing, not their production value.

Mutilations such as chopping the beaks off young chickens and the tails off piglets, are banned, as are the conditions that caused the poor mental health that led to those mutilations becoming standard. Farms are no larger than that which allows the farmer and their staff to have time to care for their animals as individuals. Abattoir services are more widely available and easier to access for all types of farmers, to ensure animals have humane deaths without the stress of being transported. Meat and fish eaters have reconnected with the animals and fish that they eat and demand catering outlets.



Thriving local food businesses

We are a Scotland where everyone is proud of our strong local food culture, a country known as a food destination for domestic and international visitors alike, and with widespread availability of tasty, nutritious, sustainable foods. Many high-quality local food brands have been established across all regions using local produce and including a wide variety of plant-based products. Thriving local food businesses exist in every community. These are big and small, and include bakeries, veg shops, butchers, cheese makers and distilleries and breweries. They are aided by publicly-financed local infrastructure and support structures, including local abattoirs, regular food markets, professional training, advice and peer networks, as well as grants and loans for equipment and improving infrastructure. Community-owned enterprises, including cooperatives, are fostering vibrant and resilient communities, especially in remote areas.

Well-funded courses for skills training and continued professional development in specialist areas are easily accessible across the agri-food sector. They offer well-structured apprenticeships, mentoring and paid internships, that translate into interesting career pathways and ensure that there is a well-skilled labour force. Advisory services provide up-to-date support for the food sector and there are well-supported, thriving active peer networks.



Appropriate technological innovation, including glasshouses heated and lit by renewables, has extended the growing season and product possibilities. Attractive support schemes encourage businesses to move to more sustainable production methods across the agri-food sector. All farms are required to regularly monitor soil health and carbon output and are supported in doing so.

Packaging has been reduced to a minimum, but where necessary it is reused or recyclable. Businesses run glass and other packaging deposit schemes. Networks have been set up to encourage collaborative sustainable delivery, including the use of electric cargo bikes and vehicles supported with a network of electric charging hubs. All food is grown to feed people, waste is minimised, carbon emissions and negative impacts on water has shrunk.

Valued food sector workers

This makes Scotland a place where all who work with food, from production and processing through to wholesale, logistics, retail, and catering, are well paid, safe, skilled and valued. Trade union activities and collective bargaining are recognised as important, legitimate ways to maintain high standards. No-one is excluded from the chance to train for or enter high-quality jobs. These are accessible to all, including ethnic minorities, people with disabilities or caring requirements, and other marginalised groups.

Thriving rural and island economies are supported by high-quality local food businesses that generate employment and invest earnings in local community wealth development. Training for new entrants to the agricultural, food and drink sectors, and continuous professional development for existing workers, is widely available. This includes training on production, processing, logistics, wholesaling, retailing, food service and hospitality and business skills, as well as urgent issues such as reducing emissions, minimising waste, recycling and composting, high-standards of animal welfare and husbandry, health and nutrition, and sustainable menus.

Advances in technology, including automation, do not reduce, or downgrade, existing jobs. Instead, they translate into work that requires higher skills and which is supplemented with training and continued professional development that improves Scotland's local food production, safety, sustainability, and security.

Food-secure households

We need a Scotland where everyone has access to, and can afford, healthy, nutritious diets, and where food banks or other emergency or charitable food aid are history. No household runs out of food. All have adequate, affordable, warm and secure housing. Social welfare support matches the cost of living, and the cost of a healthy, sustainable diet, and is easily accessible. Households do not have to jump through unnecessary and undignified bureaucratic hoops to receive it. Additional crisis funds are widely known and promoted, and accessible to all who need them. These funds are not unreasonably limited or capped, and are swiftly paid.

There is no 'in-work' food poverty. Households are not left stranded due to insecure incomes and because employers are implementing the Real Living Wage as a minimum. Employers comply with trade union negotiated pay rates and conditions and take measures to ensure greater job security and satisfaction. Local authorities' emergency food provision, provided by charity and surplus food initiatives, are consigned to the past. Instead, they operate responsive, easy to access cash-based solutions that give households dignified choices, enable them to take charge of their own situations and increase control over their lives.

Local authorities deliver in-house food services and have public procurement policies that require all businesses supplying public food to adhere to fair work principles. This includes paying the Real Living Wage as a minimum, recognising unions and extending collective bargaining.

Local sustainable public food

This implies a Scotland where all local authorities and other public bodies source local sustainable food as much as they can. As a result, processing, wholesaling, retailing and hospitality contributes to thriving local food businesses, helping to create local jobs and sustain thriving local economies. Organisations supplying public food adhere to, and source from businesses applying, fair work principles. At a minimum, they pay the Real Living Wage, recognise unions and support collective bargaining.

Local farmers, crofters, growers, fisherfolk, food processors, wholesalers, retailers, food service, and hospitality businesses have close links with public kitchens, so that they can cater to their needs and tastes, supply local seasonal produce, and help minimise waste. Strong networks of local suppliers help support cost-efficient local delivery chains that minimise mileage, simplify logistics, staff needs, storage and packaging and reduce administrative burdens. These arrangements ensure that communities eat the best affordable produce each season offers, at its freshest and with greatly reduced emissions.

Community caterers are trained to cook locally sourced, fresh, seasonal, healthy, and nutritious food into high-quality meals and take pride in designing innovative sustainable menus. In their kitchens, food waste has been cut to a minimum, as caterers and their customers know where the food comes from and the nutrients it provides. Caterers have the skills to utilise as much of the food as possible and respect the efforts that have gone into its production.

In schools, kids are taught about the complexity and importance of their local food systems: the growing and fishing, catering and cooking, processing, retail, and waste reduction, management and the circular economy, and the ways in which their participation in these activities can make for exciting future careers for everyone regardless of culture and for all abilities.

Enabling food environments

We envisage a Scotland where all neighbourhoods are places where healthy, fresh food is available to all in dignified ways. Individuals and communities are empowered to develop their own food growing initiatives using sustainable principles and practices. These showcase how good food supports well-being. There are integrated community-based and owned spaces and facilities for education and training, and sustainable community enterprises which are open to all, and bring people together, countering loneliness and social isolation. These community spaces welcome people from all age groups and ethnic and cultural backgrounds. They include, for example, shared food growing spaces and small market gardens, composting, greenhouses and nursery zones, community cafés, local food markets, repair facilities, meeting rooms, wild play areas and spaces for other food activities, crafts, artisans, and artists.

Local schools have strong links with these community spaces so that children are offered direct experience of food-growing. This activity is used to teach them about how our food is produced and distributed, about nature and climate justice and about health inequalities and the right to food. There are organisations who care for older and otherwise vulnerable people, as well as their carers, and who have links with these community spaces to support their work, facilitate communal eating and other activities, and mitigate social isolation.

Local authorities require public food procurement schemes in community-based kitchens (e.g. in schools, care homes and nurseries) to source from, and boost, local sustainable food production. These provide a mix of unpaid and paid opportunities for a wide range of abilities and ages, markets and seasonal events and celebrations.

SHETLAND'S VIBRANT LOCAL FOOD ECONOMY - Remoteness and island-specific challenges

The challenges of the last few years have been acutely felt by Scotland's food and drink businesses. They are navigating an uncertain regulatory, labour and market landscape due to Brexit and the ongoing COVID-19 pandemic bringing an additional burden of complex and costly regulations. These challenges are exacerbated for small food and drink businesses, in particular those in Scotland's rural and island locations. They face additional pressures that compromise their capacity to operate and grow, including a lack of affordable rural housing for their staff, rising costs and difficulties accessing transport, reduction in migrant workers and an ongoing gap in skills and training for local people.

Then there is the threat from large traders such as supermarkets, who can outcompete them through economies of scale and bypass local suppliers in favour of their own. In this way, a thriving local business can quickly find itself squeezed out of its local market. Rural and island-based businesses often also struggle to access nearby facilities for processing their products on a small scale, such as date-stamping eggs and abattoir and butchery facilities.

Local Authorities can mitigate many of these challenges, as Shetland Island Council has admirably shown.

Procuring supplies for school kitchens

Traditionally each school in Shetland has designed and delivered its own individual menu, nutritional analysis and procurement related costs. From August 2019, Shetland Island Council introduced a new standardised menu across all schools on the islands thus simplifying these processes. The catering department employs around 95 staff across Shetland serving approximately 2000 meals a day during school terms.

In response to their specific geographical and island needs and a commitment to buying local, they have arranged to supply bakery goods, fish, lamb, milk and seasonal veg, and local wholesalers' dry goods. The Council is working on extending this to supply Shetland beef and eggs, and is developing pilots to grow veg in the schools. While there is a cost premium associated with buying local, the spend is supporting local businesses and jobs, and helping to boost the local Shetland economy.

Other positive measures are that 96% of food served in Shetland schools is freshly prepared from unprocessed ingredients; they have Meat Free Mondays; traditional desserts are served only twice a week; schools serve more local fish than the minimum requirement; and they offer two to three meal choices per day, depending on the size of the school. In November 2021, the Soil Association awarded Shetland Island Council Bronze Food for Life accreditation. The Council is prioritising building relationships with local suppliers, catering staff and school leadership. It is also exploring ways in which school kitchens can be made available outside school days/hours/term time for small food entrepreneurs.

The Shetland Fish Auction is the UK's second largest fish auction with a strong reputation for high quality, fresh fish. Its venue is new and ultra-modern. It was opened in August 2020, funded with a £1.73 million grant from the European Maritime Fisheries Fund administered by the Scottish Government. The new facility has significantly improved conditions for its workers, grown the number and diversity of buyers, and has facilities that allow remote buyers to inspect the fish offered online. Approximately £35 million worth of fish is sold through this auction annually with the majority going into food service and hospitality rather than retail.

Mackenzies Café and shop in Cunningsburgh is an excellent example of a traditional croft working towards local community resilience. The Mackenzies developed the business after the previous local grocery shop closed. They established very short supply chains for a range of high-quality products from their croft. They successfully applied for external funding to build a community hub, which is run on sustainable principles and supports the wider local economy. Through the croft and shop, they provide employment for six family members producing and selling their own meat, eggs, seasonal vegetables, kale seeds and locally produced wool. They are widely regarded for their award-winning jams and chutneys. They support other local producers through selling their bakery goods and milk. There is a café onsite which is both an important meeting spot for locals and a popular place with visitors, employing up to 20 seasonal staff.

Sandwick Bakery and Shop is a commercial bakery and one of Shetland's largest independent private sector employers with 30 staff. The bakery is 120 years old. In any one day, they can make up to 6000 bread items in addition to pies, cakes and filled rolls. They supply directly to businesses, schools, hospitals and care homes across Shetland. The shop also offers a large variety of groceries, including fresh fruit and vegetables, meat from three local butchers, fish from the local Blydoit fish wholesaler, and local post office services. Milk and butter used in these products is locally sourced from the Shetland Farm Dairies, where available, but they are reliant on the mainland for most of the other ingredients.



Shetland Farm Dairies was bought from Robert Wiseman Dairies by 12 local dairy farmers in 1994. It provides the only commercial milk processing capacity in Shetland. It is currently supplied by the two remaining dairy farms on the islands, with approximately 200 cows. This loss of farming capacity is due to rising costs; transfer to beef cattle; demanding hours; tight margins; changing regulations (e.g. around slurry and other net zero measures); and retirement. 90% of the milk goes to liquid milk products with the rest to butter, cream and buttermilk. This limited supply of milk for processing severely constrains growth and expansion and leads to price rises especially in the summer. They employ 10 people in a variety of roles. They have started operating new vending machines in some places including businesses, schools and local shops. They have Salsa accreditation and are approved by Scotland Excel, though the admin burdens are significant.

THE MAXwell CENTRE (DUNDEE)

- A responsive local community centre with a thriving garden

Once a modest building on a derelict site, the MAXwell Centre in Dundee was refurbished in 2007 and has since developed a beautiful community garden which is managed by a large range of groups, local schools and other organisations. Each have plots, grow food, enjoy being outside, socialise, and benefit from an excellent training programme and a dedicated paid community gardener. The Centre also offers meeting rooms with a busy programme of indoor events, including creative craft classes and after-school and holiday care. They provide local residents with free access to food via a fresh local larder and well-stocked dry food cupboards. They run cooking activities, organise communal meals

and contribute to discussions locally and more widely on addressing food insecurity with dignity and respect. Dedicated support workers, including a youth worker, provide welfare and rights support as well as help with developing IT, employment and English language skills.

The Centre is highly valued by the community: it is in constant use by all ages, from toddlers to youth groups as well as older people and people from a range of ethnic backgrounds. It is an excellent example of an organisation that meets the needs of its local community in the round, including its physical and mental health, and its social and environmental wellbeing.



FOOD TRAIN

- Food as a central ingredient in community care for elderly people

Food Train works with older people across Scotland to ensure access to healthy food, supporting them in continuing to live independently, strengthening care in the community, and tackling social isolation. There is a proactive branch of Food Train in Dundee where staff and volunteers provide membership-based grocery shopping, a home drop-off and unpacking service, run a befriending and library service, and provide other domestic help for over 55s. They also organise a Meal Makers scheme that connects older people with neighbours who are happy to share an extra food portion. Staff and volunteers have specialist skills around working with older people and are guided by a model that prioritises people making their own choice. They know that shockingly, 30% of older people living at home in Scotland are at risk of malnutrition. Staff are therefore trained to use tools for diagnosing malnutrition and follow up with putting preventative measures in place.

They receive a mix of public and private funding topped up with donations. They maintain strong relationships with their local Health and Social Care Partnerships and relevant parts of their local authorities. Their work raises questions about how older people are cared for in the community, and reinforces the key roles that food and social support play in current care models.



SHORT SUPPLY CHAINS FOR ORGANIC PRODUCERS

The South of Scotland is home to a great example of how small enterprises who find it hard to find a route to market can work in partnership to do so. The Ethical Dairy, a nature-friendly farm in Dumfries & Galloway, sells its calves to an organic butchery and charcuterie in the Borders, who then sell the meat to an independent wholesaler with five outlets in the Central Belt. This effective collaboration is a powerful example of how short supply chains can strengthen rural communities and support the production of high-quality, nature- and animal-friendly, nutritious meat.

The Ethical Dairy produces traditional cheeses and ice cream made with organic milk from their dairy herd in Dumfries & Galloway. They keep the calves with their mothers to suckle. The cows and calves are pasture-fed with no additional cereal feed and are kept outside except during the winter months when they are housed in sheds designed for extra comfort. The male calves stay on the farm and are reared for beef. The farm monitors the health and well-being of their livestock and tracks their farm's biodiversity and environmental indicators. It is the first commercial dairy in the UK to be following the cow with calf method, and they have demonstrated that this model is viable and sustainable at scale. It is based around treating the animals, the land, the environment and the people who work there with respect and kindness.

The Ethical Dairy sells its calves to **Peelham Farm**, an organic and 'Pasture For Life' certified farm that produces a mix of beef, mutton and pork. The farm has three partners and employs seven people across their on-farm butchery, charcuterie and retail operation. Alongside the calves that they buy from the Ethical Dairy, they buy ewes and sows who have finished reproducing from other organic producers in Scotland.

They have mentored other farms to transition to organic and 'Pasture For Life' certification, showing how this transition can take as little as four years. They run butchery courses and an apprenticeship scheme. Their onsite wind turbine provides most of the butchery's energy needs. They sell their wares online, at farmers' market and to independent retailers including Locavore.

As there is no local abattoir, every week animals are transported to County Durham, England for slaughter, with the travel costs shared with another local organic farm. They face increasing difficulties sourcing reliable services for their online deliveries and are having to explore options to bring this service in-house. Local affordable housing, public transport and the ongoing uncertainty around agriculture subsidies post-Brexit, are the three main issues they are currently battling with, as are many other rural Scottish businesses.

Peelham sells some of their meat to **Locavore**, a business which grows, wholesales and retails organic groceries, with a strong emphasis on sourcing and supporting local and ethical Scottish producers. They run a range of activities including social projects, five grocery stores, two cafes, four market gardens and a veg box scheme that delivers around 1400 boxes a week. Recently they have won the contract to supply schools in North and East Ayrshire with organic dry goods such as rice and pasta.

The Locavore products come from regional suppliers, meat from Peelham Farm, honey from beehives in parks across Glasgow, eggs and milk from ethical local farms, locally produced oats, and locally grown and processed flour.

They buy good value products in volume and sell directly in their shops and through a veg box scheme, as well as onto progressive independent retailers and caterers throughout the UK and Ireland. In this way they support local producers and independent small businesses with a route to market and enable everybody to compete with larger retailers by creating short, fair and sustainable supply chains. They now have approximately 120 employees working across all operations and are looking to expand. They work in partnership with local city food plans and are helping to regenerate high streets in local urban neighbourhoods.

These businesses show the power of developing on-site processing capacity and driving wholesale and retail activities through short chains, while maintaining more of the margins.

These are reinvested in their local communities and build closer connections with their customers – both individuals and businesses. These margins also support raising animals with care in quality conditions, and in production systems that are predominantly grass-based that protect the land, soil, and biodiversity.

The links between the Ethical Dairy, Peelham Farm and Locavore demonstrate the value of farmers and entrepreneurs who are highly engaged and willing to develop their knowledge and skills across the supply chain. They are also an excellent example of how partnerships can evolve and change to incorporate the next generation and ensure succession, generating valuable, skilled jobs and investment in local communities.



PERTH FOOD WASTE MANAGEMENT

- The circular economy



At the Binn Eco Park, the vast majority of food waste is processed by Anaerobic Digestion, using bacteria to break down food waste producing gas that is converted into electricity and valuable liquid digestate. Mixed green and food waste (which is split 90/10) is also composted at scale and turned into organic fertiliser, which replaces damaging synthetic carbon-intensive chemical fertilisers. The business has built close relationships with local farmers, who give them positive feedback on the quality of their compost and digestate. The proposed construction of a new larger, state-of-the-art facility at nearby Earnside will enable their work to expand.

Binn Eco Park and Earnside Waste Management Sites in Perth & Kinross are Scotland's largest independent integrated waste management service sites with around 150 staff. It is an excellent example of how a partnership serves Perth & Kinross Council as well as neighbouring Local Authority areas. Following the introduction of new Waste (Scotland) Regulations in 2014, businesses who produce more than 5kg of weekly food waste are obliged to separate it, and Perth currently collects food waste from 240 local businesses. Green and food waste is also collected from 81% of Perth and Kinross households fortnightly, with approximately 4215 tons per year collected.

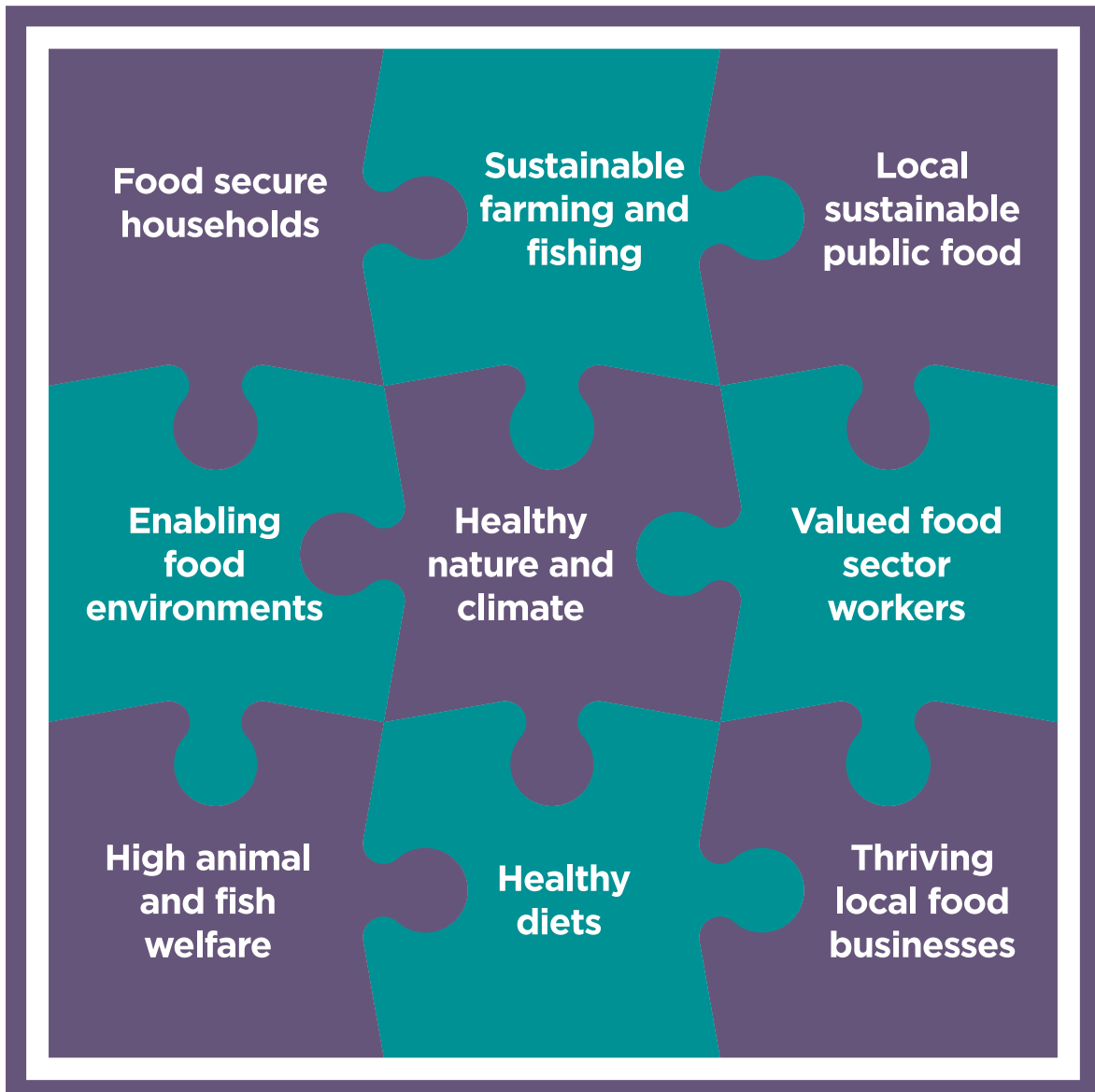
They estimate that there is at least another 7000 tons which isn't being collected, as it is incorrectly being put into general black bin waste. In collaboration with Perth & Kinross Council, they engage with households about their waste practices and address the barriers to fully recovering green and food waste. As part of this work, the site offers waste separation training and supplies a range of containers for separate food waste collection, among other things.



Chapter 4: What makes for a strong framework?

Creating a strong framework to transform Scotland’s food system requires carefully fitting its elements together, like a jigsaw puzzle. Varied challenges, interests, stakeholders and desired outcomes must align into a common vision. A puzzle design will be greater than the sum of its parts, forming a bigger picture of the whole system.

In similar ways, a strong legislative framework must make sure each individual piece is well positioned and joined-up with other parts of the food system, so positive progress can occur across the board. It must clearly articulate a common purpose, agreed direction of travel and public commitment to driving change through strong leadership.



We believe this requires collaboration and partnerships across all levels: national, regional, local, public bodies, private sector and civil society. All interested parties should have a voice. This will help facilitate stronger legislative compatibility and policy coherence across all related portfolios, issues, and policy levers (including legalisation, regulation, action plans and targets). We further believe it is essential that there is explicit independent scrutiny and review of the legislation. Those carrying it out should be accountable to Parliament and responsible for monitoring, and reporting on progress and undertaking regular evidence-based reviews.

Our vision requires open, well-resourced and dynamic methods for commissioning new research, filling data gaps, facilitating strong partnerships, and public consultation to ensure all voices and lived experiences are considered in all stages of development, delivery, and review. The Good Food Nation (GFN) Bill must create a strong, dynamic, workable and affordable legislative framework, which delivers a healthier, fairer and more sustainable food system for Scotland. Specifically, a strong framework Good Food Nation Bill must deliver:

1. A clear, explicit national and local commitment to transforming how we think about, support and do food in Scotland; strong public leadership in agreeing a common purpose for the Scottish Food System; and an explicit commitment to the right to food for all.
2. A clear, measurable and common direction of travel for national and local government and all relevant public bodies towards a set of agreed public health, environmental, social and economic outcomes, aligned with the National Performance Framework and UN Sustainable Development Goals.
3. A strong commitment to cross-portfolio partnerships, and mandatory impact assessments of all existing and new legislation, regulation, policies and action plans (by national and local government and public bodies) to test their impact on the Scottish Food System and ensure legislative compatibility and policy coherence with the GFN Bill.
4. Independent progress monitoring and scrutiny of national and local food plans through the creation, and resourcing, of an Independent Food Commission. Its remit should be to provide oversight and report regularly to Parliament on progress towards agreed outcomes, to identify and commission research to fill data and evidence gaps, facilitate collaboration across all stakeholder groups, and to lead dynamic and inclusive public engagement and consultation.
5. Adequate resources for all impacted national, local and public bodies including the proposed Independent Food Commission.

Chapter 5: How does the Good Food Nation Bill help us get better over time?

1. A joined up approach

The Good Food Nation Bill provides a framework for governing the food system in a proactive and joined-up way across production and consumption, health and environment, social justice and jobs. This must be a long-term programme of social, technical, economic and political change to transform the way we do food in Scotland and achieve win-wins: healthier people and planet, stronger communities, good jobs in food and a lively, diverse food culture.

The Bill should inform other planned legislation which relates to food. For example, the Agriculture Bill can support Good Food Nation objectives by aligning policies and resources with more sustainable food production, healthier diets, and stronger local food systems. The Public Health Bill can bring in measures to align what retailers and caterers offer, to achieve healthier and more sustainable diets. The Circular Economy Bill can drive down food waste, through better supply chain reporting and by extending producers' responsibilities, while increasing protection for Scotland's soils and reducing nutrient losses. The Natural Environment Bill can stop the degradation of the land and seas which produce Scotland's food, and instead restore them.

Requiring public authorities to produce national and local food plans will drive cycles of planning, implementation, monitoring and review. These plans should be based on an agreed set of outcomes, which should be aligned with the UN Sustainable Development Goals, the National Performance Framework and other existing Scottish Government targets.

2. Accountability

The Bill should establish an independent statutory Food Commission. Responsibility for food issues in Scotland (and the rest of the UK) is spread across many different portfolios, departments and public bodies, in both local and national government. Government departments and Ministerial Portfolios focus on their own agendas and budgets. This often creates tensions, conflicts and missed policy opportunities.

The Food Commission will provide advice and scrutiny to the Government. This is critical for the food system's just transition, as Scotland's economy responds to the climate, nature and health crises. The Commission's remit must cover all food-related issues, for example, from community food-growing to migrant fisheries workers' rights, from farmed salmon's welfare to the obesogenic food environment, from ending the need for food banks to the wider impact of pesticides. The Commission, like the UK Committee on Climate Change, will take a 'systems' approach, recognising the need for joined-up policy across departments and between local and national government.

The Commission would:

- I. undertake research and make recommendations based on evidence and current progress towards targets.
- II. produce an annual report on the state of Scotland's food system and on progress made on realising the right to food, drawing on national and local data and indicators.
- III. facilitate and support partnership working to drive food systems change.
- IV. advise on opportunities to enhance legislative compatibility and coherence across existing and new legislation, policies and action plans.

3. Participation and Inclusion

In food systems, people are usually described as 'consumers'. This sees them as passive recipients rather than active participants. Efforts at reform often focus on individual choice, on providing better information through labelling, on restricting advertising of harmful products. While these measures are useful, they don't address the underlying issues of power and purpose in the food system or change the rules which govern it.

Greater democracy in the food system means taking a rights-based approach. People should be able to expect access to affordable food which is good for them, good for animals and good for the planet. And they should have a say in how the food system works – locally and nationally. Put simply: as food consumers, people can choose from what's on the shelf. This means they can help to decide not just what's put on the shelf, but how it was produced, how fairly people, animals and the environment were treated along the supply chain, how much of it was wasted, and so on.

Active participation is key to creating food plans, for two main reasons. First, ideas get better when they come out of dialogue with people directly affected by the issues. Second, change is difficult and soon comes up against barriers around vested interests. Unless a wide range of people and organisations invest time and energy in the food plans, they won't overcome the huge inertia in the system.

Participation must prioritise the most vulnerable, and those who face the biggest barriers to realising their rights. These include refugees and asylum-seekers, people suffering from chronic illnesses, people working in the food system with low-paid or insecure jobs, people living in residential care or prison, disabled people, the elderly, and especially those who rely on social care providers for access to food.

4. The Plans

National and local food plans should align policies, incentives and resources to improve food outcomes. They should be clearly led by public authorities – whether national government, local councils or health boards – while enabling and drawing together contributions from others including businesses, third sector organisations, academia and communities. Whether plans are developed and implemented at local or national levels, they must start with an analysis of the current situation. This analysis has to go beyond listing the challenges and focus on food outcomes across the board.

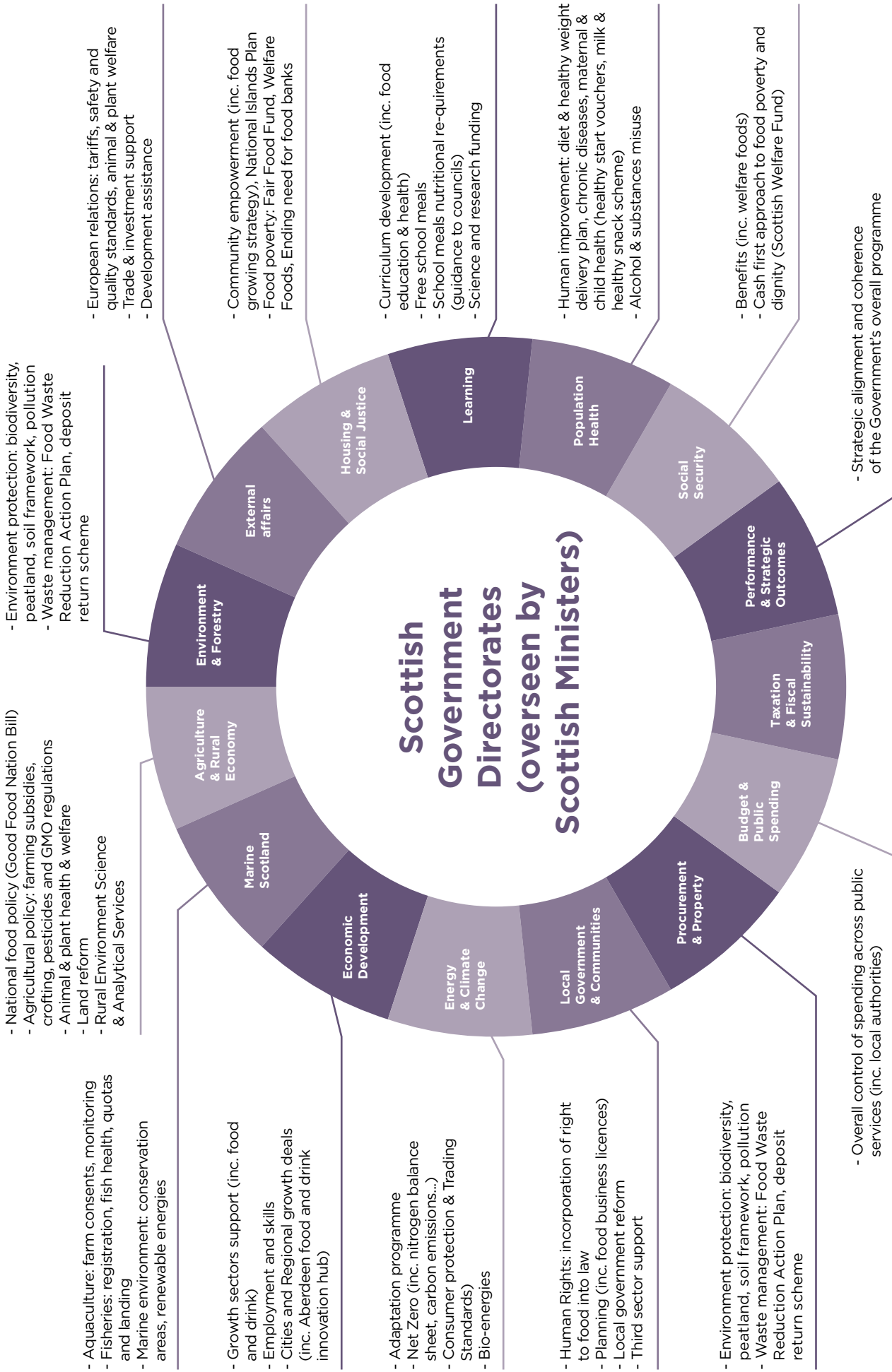
Some information and indicators will be readily available both nationally and locally, such as tooth decay in children, and the proportion of healthy weight adults. However, the planning process will reveal many areas where data needs to be refined or disaggregated, or where it is not available. The independent Food Commission will have a useful role in proposing metrics and indicators and showing where to prioritise new data gathering. Plans will then need to set out a deliverable set of proposals and policies for achieving better outcomes over time. These will be a mix of stopping or reducing bad practices and supporting or rewarding best practice.

Of course, Scotland already has many useful policies and initiatives in place, both locally and nationally. For example, universal free school meals, Best Start foods and the Scottish Child Payment all have the potential to give children a good start in life when it comes to food. Some local authorities are leading the way on public procurement, on food waste or on cash-first approaches to tackling food insecurity.

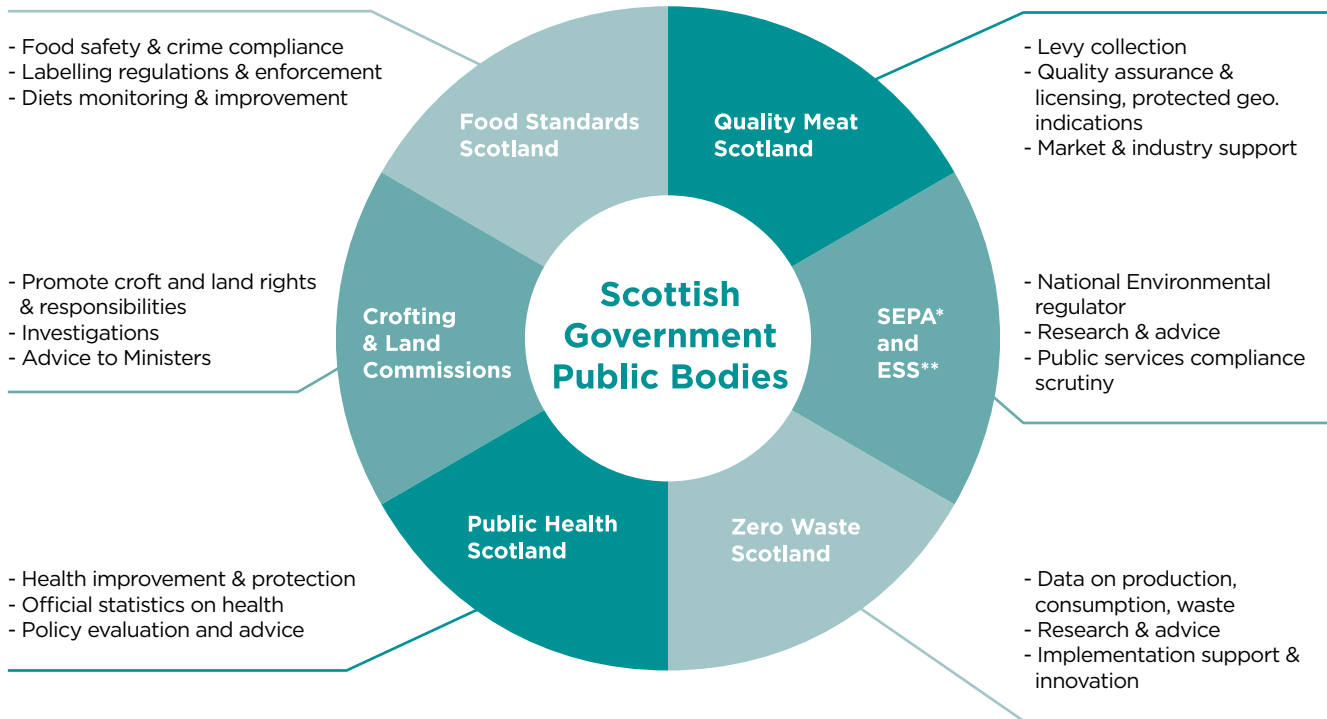
The case studies in this report are a snapshot of a few of them. Plans should report on the impacts and outcomes of these initiatives, and where relevant look to strengthen them. In developing those proposals and policies there is plenty of wisdom to draw on and no shortage of ideas.

Scotland has a wealth of community food organisations, some dating back to the 1990s when the then government funded the Scottish Community Diet Project to implement a previous strategy, Eating for Health: A Diet Action Plan for Scotland. We have innovative food businesses and farmers, active NGOs working on food issues, and a strong academic community. We can also look beyond our own borders. Local authorities can exchange knowledge with their counterparts in Scotland, the UK and Europe through the growing Sustainable Food Places network. The Scottish Government already works closely with Nordic governments on a range of issues and collaborating on food policy offers great opportunities for shared learning. More broadly, the Glasgow Declaration on Food and Climate initiated by the Scottish Government brings together cities, states and regions across the world to promote integrated food policies.

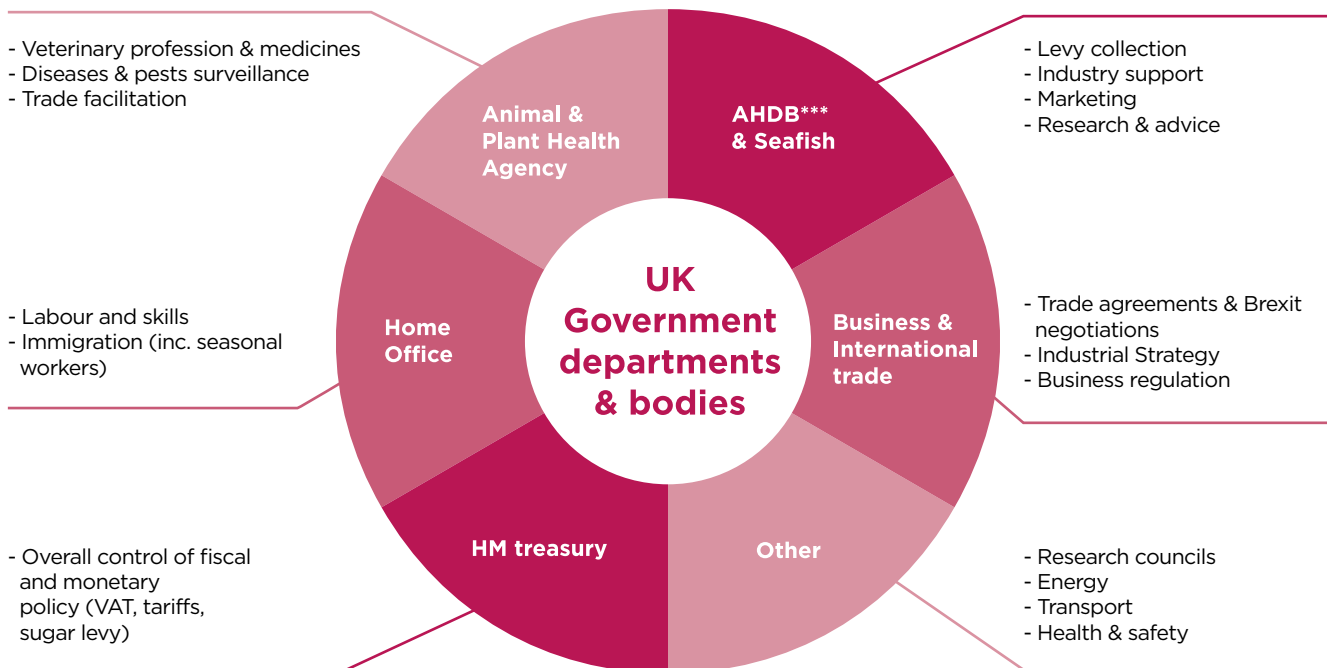
Local and national plans must complement and support each other, while reflecting the different powers and resources available. Local authorities will need resources for developing and implementing their plans. These could be met by, for example, using a percentage of the Common Agricultural Policy (CAP) replacement budget or the Shared Prosperity Fund. The Scottish Food Coalition partners have suggested a wide range of policy actions that the plans could include. Of course, it's up to those making the plans to decide on priorities - what follows are simply some ideas to illustrate the practical impact the Good Food Nation Bill could deliver over time.



The Scottish food policy landscape: responsibilities by directorate and public bodies. Source: own elaboration from organisations' websites.



Reserved matters / UK-wide remit



*SEPA: Scottish Environment Protection Agency; **ESS: Environmental Standards Scotland; ***AHDB = Agriculture and Horticulture Development Board

National

Public kitchens taking the lead Outcomes: environment, health and wellbeing, jobs, social justice

- Use public procurement to provide a secure market for high quality Scottish food, with national and local targets for organic produce. Public procurement should also set strong employment standards, such as ensuring all workers in the supply chain are paid at least the Real Living Wage.

Strengthening the local food economy Outcomes: environment, jobs

- Make suitable Government-owned land available to new entrants and expand support for community land acquisitions. Provide training and mentoring, and grants and loans to new entrants.
- Commission and fund new training programmes for small-scale agroecological farmers and market gardeners. Ensure that CAP replacement funds are available to the full range of producers (small and larger).
- Invest in and de-risk the development of a new glasshouse sector in Scotland both on brownfield urban sites and in remote and island communities, using renewable energy to grow low carbon nutritious fruit and veg.
- Ensure that the National Planning Framework 4 (NPF4) creates a presumption of access to land for growing food and prohibits development on prime agricultural land.
- Transfer funds from the CAP replacement budget to local authorities to support local food economies.

Tackling food insecurity Outcomes: health and wellbeing, social justice

- Monitor food insecurity and use the social security system to direct additional support to incomes where needed.
- Keep supporting the Real Living Wage in all parts of the economy where the Government has influence (e.g. by providing grants, discretionary relief, licensing).

- Make crisis funds available for those struggling to put food on the table. Ensure these funds are widely known and promoted, accessible, not unreasonably limited or capped, and swiftly paid.
- Provide comprehensive and accessible, user-friendly advisory services with good links to social and health services.
- Explore other ways for low-income households to reduce day to day costs, including help with fuel bills and transport costs.
- Support community-led mutual assistance programmes. These could be food- or income-related.

Moving to more sustainable food production methods Outcomes: environment, jobs

- Shift core support for farms so that it benefits climate and nature. Ensure that regulations, the advisory services, initial farmer education and continuing professional development all support the transition to regenerative and sustainable farming - farming with nature.

Animal-centred farming Outcomes: animal health and wellbeing

- Support farmers to redesign livestock farming systems to make them more animal-centred, for example ensuring cows have outdoor access, and banning the use of cages and routine antibiotics. Address similar health and welfare concerns in fish farming.

Greater transparency and public awareness Outcomes: environment, animal welfare

- Introduce mandatory production methods, environmental footprint and origin labelling for food products including fish, to enable greater transparency and recognition of farmers, crofters and fishermen who are doing the right thing.

Better employment practices
Outcomes: jobs, health and wellbeing

- Regulate precarious employment practices and ensure that all workers are empowered to exercise their full rights.
- End zero-hours contracts and ensure safe and dignified working conditions for all food, farm and fisheries workers – including migrant labourers and those in more informal work. This will attract more domestic labour and increase the food sector’s self-sufficiency and resilience.

Fair trade
Outcomes: jobs, social justice, environment

- Oppose trade deals that put downward pressure on Scotland’s food, farming, animal welfare, workers’ and environmental standards, or that reject or undermine the precautionary principle.
- Build on Scotland’s status as a Fair-Trade Nation and as a signatory to the UN Sustainable Development Goals, to develop a ‘do no harm’ ethical food policy. This will ensure that the food we import has been produced in ways that are socially and environmentally just and guarantee the same for the food that we export.
- Require producers to only use soya, palm oil and other agricultural goods which drive rights abuses and deforestation, which can be traced to specific locations and sustainable production methods.

Improving the Food Environment
Outcomes: health and wellbeing, social justice

- Restrict marketing, promotion and advertising of foods high in fat, sugar and salt. Support the marketing, advertising and sales of healthy foods.
- Introduce a levy on multiple retailers and caterers to incentivise provision of healthy and sustainable diets.
- Support the introduction of a tax on using sugar in manufacturing.

Restoring and maintaining healthy marine environments
Outcomes: environment, jobs, social justice

- Incentivise fishing businesses to limit damaging practices like dredging and trawling by ensuring quotas are conditional on good practice and workers’ rights.
- Restore the three-mile limit to boost local sea angling and improve the marine environment.

Implementing Sustainable nutrition
Outcomes: health and wellbeing, environment

- Develop national guidelines for sustainable and healthy diets, encouraging more fruit and veg consumption and science-based targets for animal protein consumption.

Reducing Food waste
Outcomes: jobs, environment

- Mandatory reporting on supply chain waste by large businesses.
- Extend Producer Responsibility on food waste – shops to take back food waste and packaging.
- Create incentives and regulations to ensure all food waste is collected separately and nutrients/carbon returned to the soil.
- Look at feeding food waste to monogastrics.

Providing Food Education
Outcomes: jobs, environment, social justice, health and wellbeing

- Introduce a Food Systems ‘Higher’, combining practical knowledge and skills with understanding the food system and food cultures.
- Embed food into teacher education on sustainability.

Local authorities

Building Local Food Economies Outcomes: jobs, environment, health and wellbeing

- Make public land available for allotments, community gardens and commercial market gardens. Assist new entrants to gain access to suitable land and facilities. Use economic development and community wealth-building approaches to invest in local food economies.
- Help local producers find routes to market. Reduce barriers between producers and low-income communities.
- Facilitate low carbon local food distribution and sales, including food hubs, markets, food co-ops, and other final-mile solutions.

Strengthening Educational Environments Outcomes: health and wellbeing, social justice, environment

- Develop ‘whole school food plans’ which connect the curriculum with the catering sector and the community, and link schools with local producers and processors.
- Regulate for healthy takeaways at school gates.

Improving Food Environments Outcomes: health and wellbeing, social justice, environment

- Regulate or limit access to unhealthy food through improved planning and registration.
- No fast-food advertising on bus stops/trams/subway/council-managed hoardings.
- Encourage and empower greengrocers to be included in town centre renewal planning.
- Require suppliers of food at festivals and other public events to meet health and sustainability guidelines.

Reducing Food and Packaging Waste Outcomes: environment

- Link licensing to catering outlets’ efforts to measure and reduce their food waste and ask them to publish their waste and reduction efforts and measurements publicly at their premises.
- Require delivery services to take back packaging or meet the disposal costs.
- Ensure water fountains are widely accessible, to reduce the need for single use water bottles.

Promoting Active Transport and 20-minute Neighbourhoods Outcomes: jobs, environment

- Install street lockers to encourage people to walk or wheel for the final mile of their journeys and facilitate reducing the carbon footprints of local farms and food businesses deliveries.

Health boards

Introducing Social Prescribing Outcomes: health and wellbeing, social justice

- Use social prescribing to help people engage with community food initiatives and link health centres with growing projects.

Joining up public procurement practices Outcomes: jobs, environment

- Undertake joint food procurement with councils and further & higher education institutions to support local economic multipliers and organic/regenerative food production methods

Introducing First 1000 Days initiatives Outcomes: health and wellbeing, social justice

- Develop an Early Years' collaboration (including training on nutrition) between health professionals, childcare/nursery workers and families, to support young Scots to get a good food start in their first 1000 days.

Appendix: How this report was put together

A review team coordinated a call for evidence in July 2021, which 80% of member organisations responded to. Further evidence was obtained from young people via jointly organised surveys and workshops. 123 pieces of evidence including reports, blog posts, journal articles and more were identified by members, and the review team did a thorough research review.

Three workshops were held to debate emerging common threads and sense check the Coalition’s vision. This report was then drafted and all Coalition partners were given the chance to comment during the final process.



References

Please refer to the digital version of this report on the Scottish Food Coalition website at <https://www.foodcoalition.scot/> for links to the references below.

- 1 Webb P. et al. (2020), 'The Urgency of Food System Transformation Is Now Irrefutable'. *Nature Food*, volume 1, issue 10, pp. 584-85.
- 2 Lang T. (2020), *Feeding Britain: Our food problems and how to fix them*. Penguin UK.
- 3 James D. et al. (2021), 'Dismantling and rebuilding the food system after COVID-19'. *Journal of Agriculture, Food Systems, and Community Development*, volume 10, issue 2, pp.1-23.
- 4 Patterson G. et al. (2020), 'Moving health to the heart of agri-food policies; mitigating risk from our food systems'. *Global Food Security*, volume 26, p.100424.
- 5 Parsons K. and Barling D. (2021), 'Food Systems Transformation: What's in the Policy Toolbox?', Report for the UKRI Transforming the UK Food System Programme.
- 6 Parsons K. and Barling D. (2021), 'Policy and Governance Questions about the National Food Strategy', Briefing paper.
- 7 Fakhri M. (2021), 'Food systems and human rights', Thematic report of the UN Special Rapporteur on the right to food.
- 8 Institute for Health Metrics and Evaluation (2019), 'The Global Burden of Disease'.
- 9 Sustainable Food Trust (2019), 'The Hidden Cost of UK Food'.
- 10 Food Standards Scotland (2020), 'The Scottish Diet - It needs to change, 2020 update'.
- 11 Food Standards Scotland (2018), 'Briefing paper on Discretionary food'.
- 12 Scottish Government (2020), 'Diet and Healthy Weight Monitoring Report October 2020'.
- 13 Dumbleby H. Dy (2021), 'National Food Strategy - The Evidence'.
- 14 SPICe (2019), 'Fast Food Booming - a Cause for Concern?'.
- 15 Scottish Government (2021), 'The Scottish Health Survey - 2020 edition - telephone survey'.
- 16 Scottish Government (2022), 'National Indicator Performance - Healthy life expectancy'.
- 17 Food Standards Scotland (2022), 'Situation report: Changes to shopping and eating behaviours in Scotland during the COVID-19 pandemic in 2020'.
- 18 World Economic Forum (2020), 'The Global Risks Report 2020'.
- 19 FAO, IFAD, UNICEF, WFP and WHO (2020), 'The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets'.
- 20 British Dietetic Association (2019), 'Malnutrition Awareness Week in Scotland'.
- 21 Eat Well Age Well (2020), 'More than Meals: Community Food Initiatives to Support Older People to Eat Well'.
- 22 British Dietetic Association (2022), 'Malnutrition: Food Fact Sheet'.
- 23 Community Food and Health (2015), 'Malnutrition Summit Report'.
- 24 Clark MA. et al. (2020), 'Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets', *Science*, volume 370, issue 6517, pp. 705-708
- 25 Climate Change Committee (2021), 'Progress in reducing emissions in Scotland - 2021 Report to Parliament'.
- 26 Climate Change Committee (2022), 'Is Scotland Climate ready? 2022 report to Scottish Parliament'.
- 27 Independent inquiry on farming and climate change in Scotland (2021), 'Farming for 1.5: From Here to 2045'.
- 28 Scottish Government (2020), 'Securing a green recovery on a path to net zero: climate change plan 2018-2032 update'.
- 29 WWF Scotland (2019), 'Delivering on Net Zero: Scottish Agriculture'.
- 30 RSPB, Scottish Wildlife Trust, and WWF (2020), 'A Nature Recovery Plan: 11 Transformative Actions for Nature in Scotland'.
- 31 SEFARI (2020), 'What is the cost of soil erosion in Scotland'.
- 32 State of Nature Partnership (2019), 'State of Nature Scotland 2019'.
- 33 RSPB (2021), 'Biodiversity loss - The UK's global rank for levels of biodiversity loss'.
- 34 UK Climate Risk (2021), 'Evidence for the third UK Climate Change Risk Assessment (CCRA3) Summary for Scotland'.
- 35 Nature Scot (2019), 'Scottish Biodiversity Indicator - The Numbers and Breeding Success of Seabirds (1986 to 2019)'.
- 36 Marine Scotland (2020), 'Scotland's Marine Assessment - Headlines and Next Steps'.
- 37 Open Seas (2022), 'Bottom Dragging'
- 38 Our Fish and Open Seas (2019), 'Evidence of continued illegal and unreported fish discarding in West Scotland nephrops (scampi) trawl fishery'.
- 39 UN Environment Programme (2021), 'Food Waste Index Report 2021'.
- 40 ING Economics Department (2019), 'Plastic packaging in the food sector - six ways to tackle the plastic puzzle'.
- 41 Zero Waste Scotland (2016), 'Household food and drink waste in Scotland 2014'.
- 42 Zero Waste Scotland (2016), 'How much food and drink waste is there in Scotland'.
- 43 Scottish Government (2019), 'Food Waste Reduction: Action Plan'.
- 44 Feedback (2020), 'Green Gas Without the Hot Air: Defining the true role of biogas in a net zero future'.
- 45 Department for Environment, Food & Rural Affairs (2022), 'Food statistics in your pocket'.
- 46 Pendrill F. et al. (2019), 'Deforestation Displaced: Trade in Forest-Risk Commodities and the Prospects for a Global Forest Transition', *Environmental Research Letters*, volume 14, p.055003
- 47 Crippa M. et al. (2021), 'Food Systems Are Responsible for a Third of Global Anthropogenic GHG Emissions', *Nature Food*, volume 2, issue 3, pp. 198-209
- 48 Griscom, B. et al, (2017), 'Natural climate solutions', *Proceedings of the National Academy of Sciences*, volume 114, issue 44, pp.11645-11650
- 49 The James Hutton Institute (2010), 'Land Capability for Agriculture in Scotland'.
- 50 Scottish Government (2020), 'June Agricultural Census 2020 - Final Results'.
- 51 Aitken M. et al. (2016), 'Climate Justice Begins at Home: Conceptual, Pragmatic and Transformative Approaches to Climate Justice in Scotland', *Scottish Affairs*, volume 25, issue2, pp. 225-252

References

- 52 Scottish Allotments & Gardens Society (2019), 'Plan to Grow Food'.
- 53 Scottish Land Commission (2019), 'Review of the Scale and Concentration of Land Ownership'.
- 54 Revive (2021), 'Our Land: a Vision for Land Reform in Scotland and How We Get There'.
- 55 McKee A. et al. (2018), 'Increasing the Availability of Farmland for New Entrants to Agriculture in Scotland - Final report to the Scottish Land Commission'.
- 56 Scottish Ecological Design Association (2021), 'A New Vision for Land Use in Scotland: 6 Conversations'.
- 57 Scottish Crofting Federation (2021), 'Crofting Federation Lay out the Fundamentals of Agricultural Support'.
- 58 OpenSeas (2021), 'Documenting a Decade of Decline in Scotland's Seas'.
- 59 Economics Observatory (2021), 'How is Brexit affecting Scotland's fishing industry'.
- 60 Food Research Collaboration (2019), 'Fish, fishing and Brexit'.
- 61 Compassion in World Farming (2016), 'UK Factory Farming Map'.
- 62 Scottish Government (2021), 'Scottish Fish Farm Production Survey 2020'.
- 63 OneKind (2021), 'Emotional Beings - Why Farmed Animal Welfare Matters in a Good Food Nation'.
- 64 OneKind and Compassion in World Farming (2021), 'Underwater Cages, Parasites and Dead Fish'.
- 65 Scottish Government (2021), 'A Fairer, Greener Scotland: Programme for Government 2021-22'.
- 66 Compassion in World Farming (2021), 'Scottish Government announces 'encouraging' policies for farm animal welfare improvements'.
- 67 RSPCA et al. (2021), 'No Animal Left Behind - Proposals for an Animal Welfare Strategy'.
- 68 Food and Drink Federation Scotland (2021), 'Food and Drink Industry - Facts and Stats'.
- 69 Food & Drink Federation (2021), 'Exports Snapshots: Full Year 2020'.
- 70 HM Revenue & Customs (2021), 'UK trade in goods statistics'.
- 71 Unite the Union (2019), 'Government Urged Not to Sell out UK Food Workers as "Chlorinated Chicken Threatens Jobs", Warns Unite'.
- 72 Food and Drink Federation Scotland (2020), 'COVID-19 impact on Scotland's businesses, workers and economy'.
- 73 SPICe (2019), 'Brexit and veterinary workforce pressures - A perfect storm?'.
- 74 Food Foundation (2021), 'The Broken Plate 2021: The State of the Nation's Food System'.
- 75 Soil Association (2021), 'AgroEcoTech: How Can Technology Accelerate a Transition to Agroecology?'.
- 76 Hasnain S., Ingram J. and Zurek M. (2020), 'Mapping the UK Food System', Report for the UKRI Transforming UK Food Systems Programme'.
- 77 Statista (2022), 'Market share of grocery stores in Great Britain'.
- 78 The Scottish Farmer (2021), 'UK organic market hits a 15 year high'.
- 79 Sustainable Food Trust (2018), 'A good life and a good death: re-localising farm animal slaughter'.
- 80 Scottish Government (2020), 'Assessing the viability and sustainability of mobile abattoirs in Scotland'.
- 81 Scotland Food and Drink (2020), 'Recovering from Coronavirus and fuelling Brexit preparations'.
- 82 Office for National Statistics (2020), 'Food and beverage services by region'.
- 83 Scottish Government (2021), 'Growth Sector Briefing - Food and Drink'.
- 84 Unite the Union (2021), 'Hospitality Workers to Protest over Lack of Action on Fair Tips at Department of Business'.
- 85 Bakers Food and Allied Workers Union (2021) 'The Right to Food'.
- 86 International Union of Food (2020), 'IUF COVID-19 Demands: Meat and Poultry Processing'.
- 87 International Union of Food (2018), 'Key Drivers in the Food Processing Industry in the next Five Years'.
- 88 Focus on Labour Exploitation (2021), 'Assessment of the Risks of Human Trafficking for Forced Labour on the UK Seasonal Workers Pilot'.
- 89 Land Workers' Alliance (2020), 'New Entrants to Agroecological Farming: Example Business Startup Costs and the Case for Public Transport'.
- 90 Scottish Government (2022), 'National Indicator Performance - Poverty'.
- 91 Scottish Government (2021), 'Poverty and Income Inequality in Scotland 2017-20'.
- 92 The Trussell Trust (2021), 'State of Hunger: Building the Evidence on Poverty, Destitution, and Food Insecurity in the UK'.
- 93 A Menu for Change (2019), 'Found Wanting: Understanding Journeys into and out of Food Insecurity: A Longitudinal Study'.
- 94 Flint K., Davis G. and Umpierrez G. (2020), 'Emerging Trends and the Clinical Impact of Food Insecurity in Patients with Diabetes', Journal of Diabetes, volume 12, issue 3, pp. 187-96.
- 95 Food Standards Agency (2020), 'The Lived Experience of Food Insecurity under COVID-19'.
- 96 The Trussell Trust (2020), 'Lockdown, Lifelines and the Long Haul Ahead: The Impact of COVID-19 on Food Banks in the Trussell Trust Network'.
- 97 The Trussell Trust (2021), 'Data briefing on end-of-year statistics relating to the use of food banks: April 2020 - March 2021'.
- 98 Poverty and Inequality Commission (2020), 'COVID-19 Crisis and the Impact on Food Security'.
- 99 Scottish Poverty & Inequality Research Unit (2020), 'Local Action in Scotland to Tackle Food Insecurity during the Coronavirus Crisis'.
- 100 University of the West of Scotland and Oxfam (2021), 'Food Insecurity in Times of COVID-19 - an Insight into a Deepening Crisis'.
- 101 Sonnino, R. (2019) 'Translating sustainable diets into practice: the potential of public food procurement', Redes (Santa Cruz do Sul Online), volume 24, issue 1, pp.14-29.
- 102 Parsons, K., and Barling, D. (2021), 'What would a transformational approach to food public procurement look like?', Report for the UKRI Transforming the UK Food System Programme.

References

- 103 Tregear A. et al. (2022), 'Routes to sustainability in public food procurement: An investigation of different models in primary school catering', *Journal of Cleaner Production*, volume 338, p.130604
- 104 Tregear A. et al. (2021), 'Measuring and comparing the carbon footprints of different procurement models for primary school meals: Analysis of cases across five European countries', in *Public Food Procurement For Sustainable Food systems and Healthy Diets*, FAO, Rome.
- 105 Stefani, G., et al. (2017). Public food procurement: A systematic literature review. *International Journal on Food System Dynamics*, volume 8, issue 4, pp.270-283.
- 106 Morgan K. and Sonnino M. (2008), *The School Food Revolution: Public Food and the Challenge of Sustainable Development*, Routledge: London.
- 107 Swensson, L.F. and Tartanac, F. (2020), 'Public food procurement for sustainable diets and food systems: The role of the regulatory framework'. *Global Food Security*, volume 25, p.100366.
- 108 House of Commons Environment, Food and Rural Affairs Committee (2021), 'Public Sector Procurement of Food'.
- 109 Public Sector Catering (2022), 'Defra creates Public Sector Food and Catering Guide for SMEs'.
- 110 Scotland Excel (2021), 'Food for thought'.
- 111 Scottish Government (2011), 'Catering for change: buying food sustainability in the public sector'.
- 112 Swensson, L.F. and Tartanac, F. (2020), 'Public food procurement for sustainable diets and food systems: The role of the regulatory framework', *Global Food Security*, volume 25, p.100366.
- 113 Turner, C. et al. (2018), 'Concepts and critical perspectives for food environment research: A global framework with implications for action in low-and middle-income countries', *Global food security*, volume 18, pp.93-101.
- 114 Needham, C. et al. (2022), 'Beyond food swamps and food deserts: exploring urban Australian food retail environment typologies', *Public Health Nutrition*, pp. 1-13.
- 115 Newing, A., et al. (2022), 'Sorry we do not deliver to your area': geographical inequalities in online groceries provision', *The International Review of Retail, Distribution and Consumer Research*, volume 32, issue 1, pp.80-99.
- 116 Townshend T. and Lake A. (2017), 'Obesogenic environments: current evidence of the built and food environments', *Perspectives in Public Health*, volume 137, issue 1, pp. 38-44.
- 117 Social Market Foundation (2018), 'What Are the Barriers to Eating Healthily in the UK?'
- 118 Macdonald, L. et al. (2018), 'Do 'environmental bads' such as alcohol, fast food, tobacco, and gambling outlets cluster and co-locate more in deprived areas in Glasgow City, Scotland?', *Health and Place*, volume 51, pp. 224 - 231.
- 119 Løvhaug, A.L. et al. (2022), 'The potential of food environment policies to reduce socioeconomic inequalities in diets and to improve healthy diets among lower socioeconomic groups: an umbrella review', *BMC public health*, volume 22, issue 1, pp.1-14.
- 120 Granheim, et al. (2022), 'Mapping the digital food environment: A systematic scoping review', *Obesity Reviews*, volume 23, issue 1, p.e13356.
- 121 Allender, S. et al. (2015), 'A community-based systems diagram of obesity causes', *PloS one*, volume 10, issue 7, p.e0129683.
- 122 Mitchell, C., Cowburn, G. and Foster, C. (2011), 'Assessing the options for local government to use legal approaches to combat obesity in the UK: putting theory into practice', *Obesity Reviews*, volume 12, issue 8, pp.660-667.
- 123 EU Food Policy Coalition (2021), 'Discovering the Role of Food Environments for Sustainable Food Systems'.
- 124 Delshad, A.B., (2022). 'Community Gardens: An Investment in Social Cohesion, Public Health, Economic Sustainability, and the Urban Environment', *Urban Forestry & Urban Greening*, volume 70, p.127549.
- 125 Gray, T. et al. (2022), 'Community gardens as local learning environments in social housing contexts: participant perceptions of enhanced wellbeing and community connection', *Local Environment*, pp.1-16.
- 126 Harada, K. et al. (2021), 'How does urban farming benefit participants' health? A case study of allotments and experience farms in Tokyo', *International journal of environmental research and public health*, volume 18, issue 2, p.542.
- 127 Nam, J., (2021), 'The Characteristics of Community-Driven Allotments and Revitalisation of Allotments in Deprived Areas-Focusing on the Case of Sheffield, UK', *Journal of the Korean Institute of Landscape Architecture*, volume 48, issue 5, pp.138-150.
- 128 Scottish Parliament Rural Affairs, Islands and Natural Environment Committee (2022), 'Stage 1 report on the Good Food Nation (Scotland) Bil'.

Our food system is broken and we, our animals and fish and planet are suffering as a result.

Drawing on evidence gathered from more than 40 organisations, case studies, workshops, research papers and more, this report offers a roadmap to a healthier, fairer and more sustainable food system for Scotland.

Together we can repair our connection to the food we eat and change our lives for the better.

But to do so we will need robust legislation that brings together our collective knowledge, power, resources, expertise and passion.

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