



GREEN OPPORTUNITIES

Supporting Wales' COVID-19 Green Recovery by identifying opportunities to support population health through sustainable means

SUSTAINABLE FOOD AND NUTRITION

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GUEST FOREWORD

Our Food System is complex. It connects the way food is produced, supplied and consumed - from the welfare of farm animals, to the wages and work conditions of everyone in the supply chain; to whether it supports wildlife and avoids pollution and deforestation, to its impact on physical and mental wellbeing.

Food is a necessity. It is essential for life and everyone in Wales should have access to enough nutritious, sustainably produced food, all of the time. However, the way much of our food is produced is contributing towards diet-related health problems, to biodiversity decline and climate change, and to a dependence on emergency food aid for thousands of people.

We know that globally a third of our food is wasted and a third of global emissions come from food and farming. These emissions are generated from a variety of processes – from agriculture and land use, to the way we store, transport, pack, process, sell and consume food. And we also know that the changing climate is impacting on agricultural production posing a significant challenge to food security when 10% of the global population is already undernourished.

In order to address these issues, we need a collective vision for our food system across all relevant policy areas at local, national and global level. An example of where Welsh Government is making efforts to approach the food system in this way is in schools. For many families, the provision of a free school meal at lunchtime for their child is a vital tool in managing household budgets and in supporting their child's wellbeing. Recent commitments to provide Universal Free School Meals to all primary aged children also include the desire to increase the amount of locally produced food served in schools that will help local economies – an aspiration that could be delivered through the Welsh Government's pledge to develop a Community Food Strategy. This strategy has the potential to create a more resilient, diverse and connected food system for communities across Wales. It has the capacity to support food production as well as local supply chains; to increase the amount of local food being served on the public plate and to encourage food citizenship and participation within communities across the length and breadth of Wales.

Finally, food education is key too. Learning about where food comes from, how to source it, how to prepare it and its impact on the environment and society need to be key elements of every child's learning journey. Initiatives such as 'Eat Them To Defeat Them' - a campaign supported by Welsh Government to make vegetables fun - provide a great way of promoting vegetables in a really engaging and inclusive way.

Recent policy developments and new commitments in Wales have the potential to be transformational for our food system and for communities across Wales. But success depends on effective implementation and integration - and that can only be achieved through deep collaboration between decision makers and all those working in, supporting the development of, and being fed by our food system.

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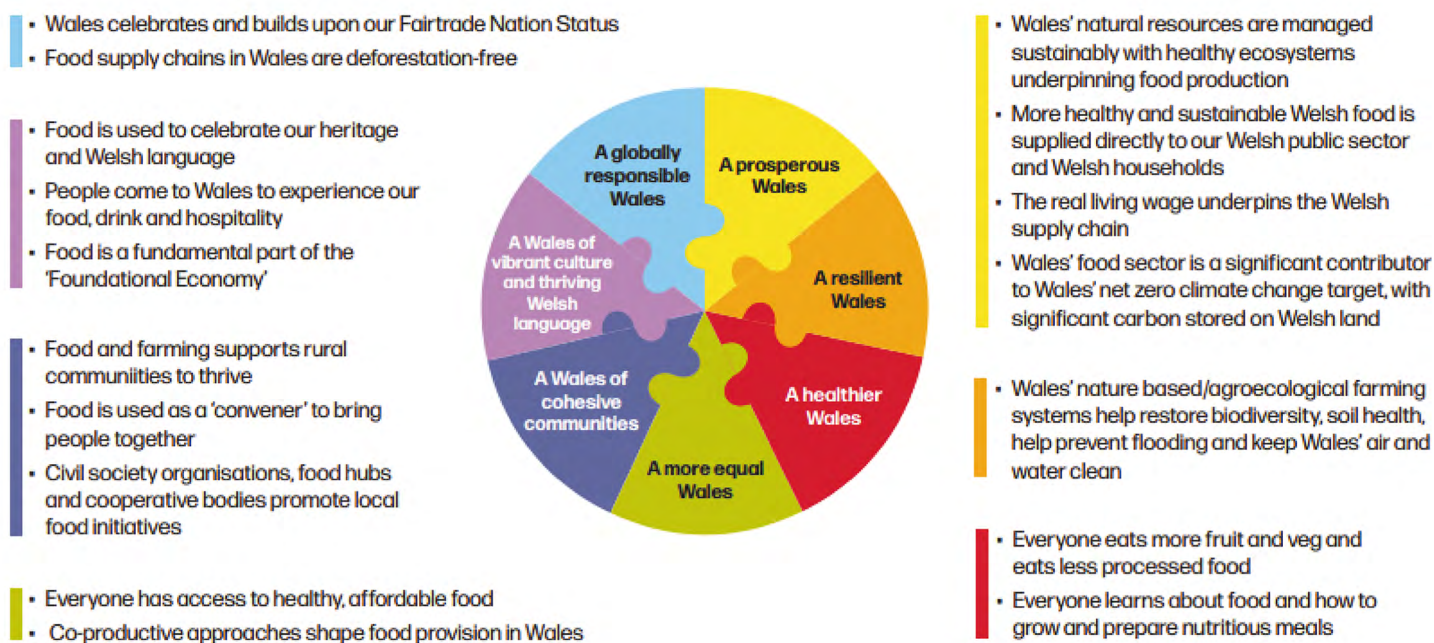
INTRODUCTION

Sustainable food systems that connect the way food is produced, supplied, prepared and consumed, will support Wales' seven national well-being goals as they are central to our health and wellbeing, our culture, society and economy. They are an important part of addressing the climate and nature crisis we now face, as well as enabling a green recovery from the COVID-19 pandemic. The outcomes that could be achieved from a food system fit for future generations is shown below.

An integrated approach to food could contribute to each of the seven goals of the Well-being of Future Generations Act:



Figure A: Outcomes of a Food System Fit for Future Generations



GREEN RECOVERY AND DECARBONISATION

As well as being complex, our Food systems are often damaging. Agriculture, food production, processing, distribution and retail combined are responsible for around 37% of global greenhouse gas emissions, and contribute to deforestation, change of land use and loss of biodiversity, highlighting the impact our diets have on climate change. Since 2008, food emissions, which include direct emissions from agricultural production, processing, transporting, storing, cooking and disposing, have fallen at less than half the rate of the wider economy. Agriculture accounts for 12% of Welsh greenhouse gas emissions, and how we manage our landfill will contribute to the target for Wales to be net zero by 2050.

In 2018, the UK produced approximately **9.5 million tonnes of food waste**, resulting in an estimated 10% of total greenhouse gas emissions. Food waste costs the average UK household over £60 a month, with just over one in four individuals reporting high levels of food waste. One of the eight priorities in Welsh Government's Beyond-Recycling Strategy aims to eradicate avoidable food waste. At the same time **food poverty** is becoming an increasing concern with a report from The Food Foundation showing that 160,000 children in Wales are living in households for whom a healthy diet is increasingly unaffordable.

Food systems post COVID-19 pandemic are facing many challenges to become healthier, greener, fairer... Manifestos are being proposed and strategies developed making commitments to reshape international and national food systems and to reduce greenhouse gas emissions. In Wales, the Green Recovery: Priorities for Action Report, the Co-operation Agreement and the Food (Wales) Bill aim to ensure that the food system is resilient to future challenges.

The consumption of healthy foods produced by working with nature presents major opportunities for reducing greenhouse gas emissions from food systems and for improving health outcomes. It has been estimated that if average UK diets met World Health Organization nutritional guidelines, dietary emissions could be reduced by 17%. Organisations are working together to influence how food is produced and consumed to help support health and

well-being, for example, [Sustain](#), [Sustainable Food Places Network](#), [Sustainable Food Places Wales](#), [Food Sense Wales](#), [Food Vale](#) and [Food Cardiff](#). Partnership food action strategies and plans that focus on establishing sustainable food systems with and for communities are being developed, including [RCT \(Rhondda Cynon Taf\) Food](#), [Blaenau Gwent Food Partnership](#), [Monmouthshire Food Partnership](#) and [Food Cardiff](#).

Additionally, [WRAP](#) is working in partnership with organisations to reduce food waste and every [local authority in Wales](#) offers a separate food waste collection service. Newtown Food Surplus, a food distribution project launched in October 2021, has helped to feed hundreds of people with surplus food being used to make meals at Newtown Community Café and preventing 5.5 tonnes of food from going to waste.

The [NHS Wales Decarbonisation Strategic Delivery Plan 2021-2030](#) includes a focus on food including improving food sustainability, food procurement, food production and food storage. Ideas are explored in a [Food Sense Wales podcast: Food. Climate. Change? – The road to net zero](#).

Other examples are provided in "[Working Together to reach Net Zero](#)".



SUPPORTING BIODIVERSITY

[Global agriculture](#) uses approximately 40% of the Earth's habitable land surface, most of which consists of land for grazing livestock with a smaller amount used for growing permanent crops, such as fruit trees and cocoa or oil palm plantations. As agricultural production has intensified, [biodiversity](#) has declined significantly. Since 1930, in the UK, it's estimated that 97% of wildflower meadows, half of ancient woodlands, 56% of heathland and 90% of lowland ponds have been lost, due to development of land for property, changes to farming methods and the way we manage our gardens.

COVID-19 highlighted the pressures on farmers and distributors to meet 'just in time'; deliveries, local and national restrictions meant fruit and vegetables were not harvested. As well as the negative impact on [increased food prices](#) and a [decrease in dietary diversification](#), food workers were on the front line and particularly vulnerable to the pandemic. Many people in Britain took to 'growing their own' produce, with [7.4 million](#) trying it for the first time during the pandemic. As well as enabling people to reconnect with nature, local growing also supports biodiversity providing food and habitats for local wildlife including birds, mammals, insects, reptiles and amphibians.

Biodiversity is vital for food production and environmental sustainability. [Integrating biodiversity](#) across food systems offers benefits to natural habitats, protects birds, insects and animals, and impacts positively on climate change and recovery from the pandemic. The [Sustainable Farming Incentive](#) in England supports farmers to produce food in a way that benefits the environment, reduces emissions and biodiversity loss and promotes clean air and water. In Wales, the [Sustainable Farming Scheme](#) will commence in 2025. International success stories include [Madagascar](#) where bats have been found to provide a valuable pest control service for rice farmers. Also, some bats eat nectar and also [pollinate important crops](#) for example agave in tropical and sub-tropical areas of the Americas.

Across Wales there are a number of projects producing more vegetables, fruit and crops that enhance biodiversity and support environmental sustainability, including [Community Supported Agriculture Projects](#), [Cae Tan](#) in the Gower, [Our Food Crickhowell](#), [Riverside Market Garden](#) in the Vale of Glamorgan and more recently [Swansea Bay University Health Board](#).

DID YOU KNOW?

- Wales is part of the international food system, which is influenced by global trade, production and events such as Brexit and the COVID-19 pandemic.
- The way our [food is produced](#) and sold to us creates a [third](#) of the global greenhouse gas emissions.
- In the UK, the equivalent of [20 million slices of bread](#) are thrown away daily – this could have been breakfast for 10 million people!

WHAT CAN WE DO?

We can grow our own food and/ or buy local food in season, as well as follow food-based dietary guidelines, such as the Eat Well Guide, to help reduce the carbon footprint of your food and diet choices.

We can also reduce our food waste, which will also help us to reduce our carbon emissions.

We can encourage partnership working between organisations and community groups to influence sustainable national and local food initiatives. Information and support is available from Sustain and Food Sense Wales.

HEALTH AND WELL-BEING

Food insecurity can impact on health and well-being, causing stress, poor mental health and negatively impacting children's development. Poor diet and nutrition increases the risk of developing malnutrition and long term health conditions. Foods high in fat, salt and sugar are usually cheaper and eating a healthy diet can be too expensive for lower income households. The poorest communities with the poorest health experience the greatest impact of food insecurity

In some communities and groups, the COVID-19 pandemic led to a further reduction in the consumption of fruit and vegetables. In 2020, only 25% of adults in Wales ate the recommended five portions of fruit and vegetables a day, compared to 32% in 2014.

Following national dietary guidelines would increase average life expectancy in the UK and reduce carbon emissions by 17%. National level food strategies and plans have been developed in England and Wales, including Healthy Weight Healthy Wales, with local level plans following, for example in Monmouthshire. Post Brexit and COVID-19, agricultural policy and food strategies together could have the potential to increase the intake of fruit and vegetables, reduce health inequalities and contribute to addressing climate change.

GREEN AND FAIR ECONOMY / EMPLOYMENT

Brexit, climate change, COVID-19 and the recent energy price rises are all impacting on income, employment and food security. Across the UK, agriculture has experienced a shortage of workers, delays in harvesting crops and in sending livestock to slaughterhouses, and difficulties in accessing hauliers, all impacting negatively on the food system.

The food and drink industry, including agriculture, fisheries, supermarkets and restaurants for example, are important employers in Wales and represent a higher proportion of the Welsh economy compared with the rest of the UK. Meat and meat products, dairy products and eggs were the most valuable export categories for Welsh food and drink in 2020.

A recent report on global impacts shows that an area equivalent to **40% of the size of Wales** is used overseas to grow commodities imported into Wales including soy, palm, beef and cocoa. Changing to ethically-sourced, Fairtrade products produced using sustainable agriculture (agroforestry) can help reduce this, where trees are grown alongside crops and/ or animals, to help increase biodiversity and improve nutrients and water cycling.

The proposed Agriculture (Wales) Bill 2020 highlights the need for sustainable land management and the Agriculture (Wales) White Paper sets out processes that ensure that it is possible to farm in a way that produces food, addresses climate change and restores biodiversity. Additionally, the recent Co-operation Agreement, between Welsh Government and Plaid Cymru, outlines the need to set meaningful targets to increase Welsh public sector procurement from Welsh producers and promote the purchasing of made-in-Wales products and services.



Purchasing locally grown produce and goods supports local businesses as well as putting us in touch with where our food is grown. The [Community Supported Agriculture Network](#) and grants (for example, [Food4Growth grants](#)) are supporting farms and growers to increase the amount of food produced locally, to engage with communities and create new food networks. [Vertical farming](#) and [rooftop greenhouses](#) are increasingly being used in urban areas and have the benefits of being close to customers.



SUPPORTING VULNERABLE GROUPS

During the COVID-19 pandemic, many people experienced [job losses](#), [reduced pay or hours](#), or [were being furloughed](#). In Wales, the COVID-19 pandemic highlighted the lack of resilience in the food system and the [cost and availability of healthy food](#) was a major constraint among disadvantaged communities.

[Food insecurity](#), [food poverty](#) and access to [foodbanks](#) increased and the impact was highest in [households with children](#), those from [Black and mixed ethnicity households](#) and by people with [disabilities and/or learning disabilities](#). The increase in [cost of living](#) has added to food prices and people have less money to spend on food. Together this has all impacted on [health inequalities](#) and diet related health conditions.

Actions that support individuals, families and communities include access to free school meals, access to [Healthy Start Vouchers](#) and [Rose Vouchers](#) and access to school holiday programmes. For example, the [School Holiday Enrichment Programme](#) in Wales provides food and nutrition education, physical activity and healthy meals to children in areas of social deprivation during school holidays.

Other initiatives focus on supporting access to affordable, local healthy food in local shops, markets and schools, for example, [Food Power](#), [Peas Please](#), local [food markets](#). Additionally, food distribution through [local pantries](#) and [community fridges](#), [foodbanks](#) and [surplus food distribution](#), has a role to play.

MENTAL WELL-BEING

The COVID-19 pandemic had an [adverse effect](#) on population mental health and well-being. Lockdown measures resulted in issues around [food availability](#), causing stress and anxiety, and negatively impacting on mental well-being. [Addressing inequalities](#) in food supply, access, cost and availability is imperative to improving the mental health of disadvantaged groups and communities.

Time spent outside in green spaces and being involved in [growing food](#) has a positive impact on our mental health. Access to [community gardens](#) for example, could help minimise food insecurity and food poverty, while also reducing loneliness and anxiety. Creating a [National Nature Service](#) has been proposed by Natural Resources Wales' Green Recovery taskforce with support from the Future Generations Commissioner to restore damaged and protect existing wild spaces. This could have a positive impact on our mental and physical health and our environment. It could also create good jobs and help young people learn about the environment.

[Social Farms and Gardens](#) and [Food Growing Garden](#) (Keep Wales Tidy) promote community growing in Wales and [Food Cardiff](#) supports access to food growing resources including the Edible Cardiff Network. Local authorities can also influence the [food environment](#) through land use planning processes and provide access to food growing spaces near homes and within communities. Most local authorities provide [allotments](#) although there has been a [significant fall](#) in the number of allotments since the 1950's and a [huge increase in demand](#) over recent years.

YOUNG PEOPLE

The United Nations [Convention on the Rights of the Child](#) states that 'Governments must provide nutritious food ... so that children can stay healthy'. In the UK, the Food Foundation has established a [Children's Right2Food Charter](#).

[Food poverty](#) among children and young people increased prior to and during the pandemic. Between July and December 2020, 12% of UK households with children (equivalent to 2.3 million children and 1.3 million adults living with them) reported experiencing [food insecurity](#). In [the UK](#), children ate less fruit and vegetables, undertook less physical activity and had more emotional problems during the pandemic. In Wales only [45% of children](#) entitled to free school meals ate five or more portions of fruit and vegetables during lockdown, compared to 69% of children not entitled to free school meals.

[45%](#) of young people are more aware of injustices in the food system and more are cooking and learning about where food comes from. There is an increase in those stating that they are vegan in younger age groups, and in those shifting to a [plant based diet](#), demonstrating concern about where food comes from, animal welfare issues and environmental impacts. Campaigns such as [Eco Schools](#) are supporting school children to consider food consumption and waste from a young age, whilst [Cardiff University](#) is leading the way as the most vegan-friendly university in the UK.

In Wales the [Welsh Government](#) has made a commitment to extend the provision of free school meals to all primary school aged children and initiatives that further support schools include [Veg Power](#), [Peas Please](#) and [Eat Them to Defeat Them](#). Some schools are also involved in [food growing schemes](#) and in [teaching](#) children to cook.

DEVELOPMENTS FROM THE FUTURE GENERATIONS COMMISSIONER FOR WALES

Food security and its impact on population health has been identified as a key issue by the [Future Generations Commissioner for Wales](#). In the [Future Generations 2020 report](#), a policy recommendation was made to develop a food system strategy for Wales that links all the elements of the system from 'farm to fork'. Supporting communities to be able to access food growing spaces, encouraging the supply of locally sourced food in Wales and developing a National Nature Service have also been identified by the [Commissioner](#) as priority actions.

The [five ways of working](#) and the 'Art of the Possible' programme endorse actions that promote sustainable food systems and contribute to goals of 'A Healthier Wales', 'A More Equal Wales' and 'A More Resilient Wales'.

REMEMBER... 'BE THE CHANGE' FOR WALES' WELL-BEING GOALS

'Be the Change' is a campaign to encourage and support staff to take sustainable steps in the workplace, individually and within teams, to contribute towards Wales' seven well-being goals (in the Well-being of Future Generations Act). The [Be the Change Well-being Goals Challenge](#) has been designed to help organisations adopt 'Be the Change' in their places of work, providing information and knowledge to support small sustainable changes, including a plant-based diet challenge.



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