A Welsh Food System Fit For Future Generations

A report by the Sustainable Places Research Institute at Cardiff University, commissioned by WWF Cymru

By Dr Angelina Sanderson Bellamy and Prof Terry Marsden

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Foreword

WWF Cymru’s aim is to help create a Wales where people and nature can thrive, for generations to come.

Our work on sustainable development helped the passing of the Well-being of Future Generations Act into law in Wales in 2015. We want to see transformational change in the way that government thinks and acts – developing an approach which makes decisions in a joined-up, strategic way that considers the needs of the Wales and the world of the future.

We believe that the food sector provides the perfect opportunity to demonstrate the difference the Act can make to improved outcomes.

A well-functioning food system is crucial to our nation’s future. It’s central to our health and well-being, our culture, society and economy. Environmentally, it’s an important part of addressing the climate and nature crises we now face.

With this in mind, we commissioned the Sustainable Places Research Institute at Cardiff University to produce this report to help us understand what a food system fit for future generations could look like in Wales. The report is ambitious in providing ideas for immediate action as well as further discussion and research.

Despite agreement on the important contribution food makes to Wales’ future prosperity and sustainability, there are divergent opinions on which interventions to pursue. We therefore hope this paper will provide a useful contribution to the future food debate.

We would like to thank the Sustainable Places Research Institute for conducting this research and preparing a vision for the future of food in Wales.

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Dr Sanderson Bellamy is a Research Fellow in the Sustainable Places Research Institute. Her expertise encompasses food production systems, land use and land cover change, ecological resilience and ecosystem services. She uses a social-ecological framework and interdisciplinary methods to investigate the drivers, particularly governance and support structures, of environmental change and the impact of land management on the delivery of ecosystem services. Her experience draws from working across Latin American and UK food landscapes, and she is the Principle Investigator for TGRAINS, a UKRI-funded project on how to make UK regional food systems healthier and more environmentally sustainable.

Professor Terry Marsden

Terry Marsden currently holds the established chair of Environmental Policy and Planning in the School of Geography and Planning at Cardiff University. He is Director of the Sustainable Places Research Institute at Cardiff. He researches the interdisciplinary social science and applied policy fields of rural geography, rural sociology, environmental sociology, geography and planning. Terry has published over 150 international journal articles, book chapters or books. This includes 20 research monographs and edited collections. This body of work ranges from original theoretical work in the field, through to empirical analysis and emerging policy impacts and analysis. It includes wide ranging work on: the socio-economic restructuring of agriculture; theorisations and empirical investigations of rural development; analysis of agri-food chains and networks; and critical commentaries in the emerging fields of environmental sociology.
Executive Summary

How to deliver healthy, nutritious food for all in the face of shrinking resources and a growing population, while addressing climate change and biodiversity loss, is a major challenge both globally and for Wales. A raft of recent reports have highlighted the need for food system change. We have an opportunity in Wales to design a food system that works hand-in-hand with nature and truly delivers well-being for future generations.

The Welsh food system forms part of a wider, international system, with much of our food economy integrated into UK-wide networks. This is recognised throughout the report, but the focus is on those issues where Wales has devolved authority to act. The Well-being of Future Generations Act, in particular, gives us the opportunity to adopt a leading role in the UK in developing food policies, within the wider UK context of Brexit and the severe challenges the UK food system faces.

Our food system encompasses a wide range of activities from farm to fork. A supply chain of producers, manufacturers, processors and retailers operates locally and globally, with consumers enjoying products from across the world as well as from local food businesses. The food system is a vital component of our economic, environmental, social and cultural well-being. It feeds us, provides jobs, and supports communities and culture.

But there are systematic problems that need addressing urgently too. Many people in Wales cannot afford access to a healthy diet. The food system has negative impacts on the environment, public health and economic well-being. This hinders our ability to prosper as a nation both now and in the future.

Affordability and diets:
Resource to food banks is rising, with The Trussell Trust report providing 153,372 three-day emergency food supplies in Wales in 2018/2019. One in five of people in Wales worry about running out of food due to lack of funds according to the Food Standards Agency, and 40,000 children in Wales live in households for whom a healthy diet is increasingly unaffordable. Meanwhile, rising rates of obesity cost the health services £79 million per year;

Environmental impacts:
The Welsh government has declared a climate and nature emergency. Wales’s first State of Nature/Resources report concluded that none of Wales’s ecosystems have all the attributes required for resilience. Wales’s wildlife continues to decline according to the State of Nature 2019 report, with the latest findings showing that one in six species are at risk of extinction. Un可持续农业管理是单个最大驱动

Economic well-being:
Many working in the food industry receive low pay and many farmers are highly dependent upon current EU subsidies. The uncertainty of post-Brexit payment support and the potential impacts of Brexit on UK export markets make this a deeply concerning time for many in the food industry.

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

Wales urgently needs to create an integrated, sustainable and just food system fit for future generations.

The Well-being of Future Generations (Wales) Act provides the vision and levers needed to achieve this transformation. It can facilitate a more joined-up approach across the food system, for example by linking agricultural policy with health policy and connecting the food we produce in Wales with the food we consume.

The food sector provides an ideal opportunity to demonstrate how a systems approach can deliver a wide range of benefits under each of the Act’s seven well-being goals and apply the sustainable development principle as set out in the Act. With the right policies in place, re-localising our food production and consumption and promoting shorter supply chains can generate multiple benefits for the local economy, environment, health and well-being.

Developing a food system strategy for Wales

To deliver a food system fit for future generations, with all the benefits this will bring, the Welsh government needs to develop a food system strategy for Wales. Drawing on recent international reports, scientific evidence and policy approaches in the UK and EU, and current food policies and legislative requirements in Wales, we recommend three major components in developing this strategy:

1. Co-creating a new vision for Welsh food, based around 10 key interlinked themes

The 10 key interlinked themes

1. Agroecological farming
2. Agroecological farming skills
3. Horticulture promotion
4. Local food procurement
5. Sustainable food hubs
6. Food cooperatives
7. Digital markets
8. Sustainable dietary guidelines
9. Quality food standards
10. Promote Welsh food in a British Isles context

An innovative new vision for Wales should centre around re-localising the food system, restoring environmental, social and human capital to strengthen food security and capture more value locally. It should look at what we can sustainably produce in Wales, and tailor this to consumer demand and market opportunities. This vision needs to be co-produced between government, farmers, food businesses and other stakeholders including, importantly, the public through new participatory approaches at local, regional and national levels.

Wales needs to create an integrated, sustainable and just food system fit for future generations.

In building the local supply of healthy, sustainable and accessible food, Wales’s food and farming sector should regenerate its ecological foundation, restoring nature to provide the many functions and services that farmers and society rely on. We recommend that Wales makes this transformation to an agroecological farming region by 2050.

Agroecology/Agroecological principles includes ecological concepts and principles to food production practices, managing interactions between plants, animals, humans and the environment for food security and nutrition. For example, an agroecological approach to soil health would one which focuses upon natural inputs and their retention. The diversity of practices within an agroecological system creates a more robust and resilient system that is less vulnerable to international market dynamics.

Farming using agroecological principles will require a comprehensive package of training and skills. Welsh government should support the setup of regional training centres to drive collaboration and knowledge exchange, drawing upon the wealth of knowledge of farmers, businesses and local educational institutions. Training and business advice, as well as widening access to land, are needed to increase local food production in Wales.

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Public Service Board Well-being Plans should include public value criteria around environmental, welfare and nutritional standards in food production.
2. Infrastructures: rebuilding sustainable food provision

Food infrastructures need rebuilding. To support local supply chains and rebalance the distribution of power, infrastructure is needed in towns and the countryside to link food producers to consumers in more diverse ways. This means more sites for food markets, community retailers and food processors, investment in food cooperatives and the development of a network of food hubs that aggregate and distribute local food. Local authorities should be required to make plans for developing food hubs, which could facilitate local and regional provisioning and procurement for the public sector as well as private buyers.

Wales should embrace and develop digital food markets and supply chains that link consumers with producers and food hubs. Increasing citizen ownership and involvement in a more localised food system can improve community cohesion as well as help shape what is produced and how. These re-localised infrastructures will also allow retailers to stock more local food produced through agroecological based farming practices.

3. Delivery mechanisms

To realise the new food vision for Wales and build the necessary food infrastructure, an integrated set of policies and funding mechanisms need to be developed. Public Service Board Well-being Plans and Well-being Assessments, Natural Resources Wales’s Area Statements and the school curriculum should be key vehicles to deliver sustainable food production and consumption.

A new Wales Food Commission should be established to oversee the delivery of the food system strategy, comprising the Future Generations Commissioner, Area Statement leads, education and public health boards, Welsh government leads on food policy (including agriculture, procurement, health and social care) and food practitioners (including community-based organisations and environmental NGOs). We also recommend creating a National Universal Food Framework to ensure all Welsh people have the right to access healthy food.

1. Introduction

This report explores the necessary ingredients needed to help shape the development of an integrated Welsh food system and provides a strategy and interlinked actions that would place food policy as a central public policy in Wales. It sets out the principles and key components that would make up an integrated food system and provides a framework to help start a discussion around what an integrated food system in Wales should look like. Crucially, this study sets out the opportunity we have to apply the Well-being of Future Generations (Wales) Act 2015 systemically in achieving an integrated food system in Wales and why now is a crucial time for achieving this. Given the context of the Act, which sets out a vision of well-being for current and future generations, Wales can be a leading player in the way forward for devolved UK countries.

The report highlights what an integrated food system should look like in accordance with the ways of working and well-being goals of the Act. The food sector provides an ideal opportunity to demonstrate how a systems approach can deliver a wide range of benefits under each of the Act’s seven well-being goals and apply the sustainable development principle as set out in the Act.

Throughout the report it is recognised that much of the Welsh food economy is integrated into the wider UK food economy. Nevertheless, it also recognises that Wales holds devolved authority for developing its food and agricultural policies and has developed a unique set of statutory powers associated with the Well-being of Future Generations Act. As such, Wales has the opportunity to adopt a leading role in the UK in developing its food policies, within the wider UK context of Brexit and the severe challenges the UK food system faces. This paper outlines the key roles in which this capabilities and capacities to enact this can be achieved.

Next steps

This report proposes a radical reconfiguring and realignment of food policy in Wales. We hope it provides ideas for immediate action as well as further discussion and research. We are keen to engage with stakeholders to identify areas of common ground and explore differences to help create a food system in Wales fit for future generations.
The food system is vital for future generations to better safeguard their health and wellbeing, and environmental well-being which supports this. Yet at the moment, the global food system also forms a threat to future generations through its contribution to production, distribution and consumption practices which endanger health, contribute to the nature and climate emergencies and food insecurity.

Ecosystem resilience and a strong, healthy environment underpins the entire food and drink sector and provides the fundamental building blocks for food production. Without functioning ecosystems and a biodiverse natural environment, production of food is greatly reduced.

In looking at the current state of Wales’ ecosystems, Wales’ first State of Natural Resources Report concluded that none of Wales’ ecosystems have all the attributes required for resilience. Wales’ wildlife continues to decline according to the State of Nature 2019 report with the latest findings showing that one in six species in Wales are at risk of extinction. Unsustainable agricultural management is the single largest driver of biodiversity decline, while agriculture accounts for 12% of Welsh greenhouse gas emissions. Agricultural pollution is a contributor for why only 37% of all water bodies in Wales achieved good or better ecological status in 2015. Furthermore, wages have not kept pace with the increasing cost of living, creating food poverty and insecurity in an increasing number of households. In Wales, 14% of people reported in 2017 that they had experienced a lack of food without enough money to buy more. 

Epidemiological approaches
Health sciences
Risk Analysis
One Health

Food system approaches
Food and health sciences
Agronomy ecology

New reconnection paradigms
Food systems, new social policies and social inclusion?

Economically-based agricultural models

Figure 2: Food system reconnections: After Lamone, 2019

The food system is referred to as a system because it is highly interconnected. Thinking systemically at an interdisciplinary level can help ensure that challenges are tackled from multiple perspectives and in a holistic way (see figure 2 above). Many diseases and conditions have diet as a major risk factor and the Public Health Wales and Welsh Government have focused strategy on improving diets in its Healthy Weight Healthy Wales Strategies; these policies do not yet cross over to other policy sectors that influence food and drink businesses, marketing and advertising, food production, zoning restrictions or influence the cost of living so that people can afford healthy diets.

Food also links to important biodiversity and climate change challenges. Wales’ food system needs to sufficiently account for its direct and indirect impacts on the environment. This has not been factored in strongly enough in recent consultations on the food sector in Wales, particularly the integrated impact assessment attached to the Developing Wales’ food and drink sector consultation which does not cover a full range of impacts. Unless such food plans should wholly apply the Environment Act, including part 1 (the sustainable management of natural resources) as Wales’ resources should be managed in a more proactive, sustainable and joined-up way. The Developing Wales’ food and drink sector consultation report addresses important themes of collaborative working across industries and promises important support for building skills within the sector that are vital for continuous development and prosperity of the food and drink industry. However, as an overarching food policy document, it takes too narrow an approach to the food system and misses an opportunity to more explicitly link up with other consultation reports.

The most recent Welsh Government Sustainable Farming and Our Land consultation proposes a new land management system that uses tax powers / money to promote resilient agricultural systems and identify quality and reward farmers for restoring and looking after nature for the benefit of all people in Wales. This is a big change in direction from past farming policies that have shaped the way we farm the land. The proposals set out promising and indicative political principles to address certain challenges in the agricultural sector. Again, this is just one part of the food system in Wales; sectoral approaches to food in Wales misses opportunities to achieve co-benefits that can result from combining approaches to healthy diets and sustainable agricultural practices.

2. Why take an integrated approach to the Wales Food System?

Since 2018, we have seen a range of high-level and international reports (e.g. EAT Lancet; IPES, RSA) demonstrating a more urgent need for an integrated systems approach to food and food policy. This sees the important changes in the food system as central for delivering on a number of global challenges, among them how we address biodiversity loss and climate change, food insecurity and health, as well as reducing the inefficiencies associated with food waste and especially plastics. The realisation is that it is no longer sufficient to talk about a more sustainable food system; but rather there is a need for a radical transformation of the system so as to deliver sustainable and healthy food for all in the face of shrinking resources and a growing global population.

The food system is vital for future generations to better safeguard their health and wellbeing, and environmental well-being which supports this. Yet at the moment, the global food system also forms a threat to future generations through its contribution to production, distribution and consumption practices which endanger health, contribute to the nature and climate emergencies and food insecurity. 

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The Public Health Boards run a number of programmes to address gaps in nutritional and cooking skills in the adult population. The ongoing redesign of the Wales’ School Curriculum would benefit from an overarching food system policy steer with respect to incorporating nutrition and cooking skills for 3- to 18-year-olds. The current section of the education curriculum on health and well-being represents an opportunity for integrating these themes, but this will come down to individual schools. This also illustrates the need to integrate food policy not just horizontally, but vertically from local, regional to national scales. Owing to the sectoral approach to food, there are many opportunities for synergies that are being missed. A ‘joined-up’ food policy creates the framework, mandate and implementation plan for solving these and other problems. We particularly need to more clearly align food production and consumption in Wales.

Food policy needs development as a central part of public policy because a central guiding principle is that it is government’s responsibility to ensure minimum standards and rights to high quality and nutritional foods for all. It would also challenge many of the central tenets of current agricultural and economic development, and the healthcare system that concentrates on cures rather than prevention. This contrasts with the Well-being of Future Generations Act’s mandate for preventative ways of working. Candeil and Peréz (2017) identify five particularly demanding areas of concern for integrating approaches to food systems policy: (i) constructing a resonating policy frame (involvement); (ii) formulating policy goals that take into preventative approach; (iii) involving relevant sectors and levels (collaboration); (iv) the question of what constitutes optimal policy integration; and (v) designing a consistent mix of policy instruments. We highlight that although taking a food system approach is challenging, the Act mandates the five ways of working, four of which we highlight in bold above: long-term thinking, involving, prevention, collaboration and integration.

Developing a systems approach to food policy achieves the final way of working: long-term thinking. Because the objective is to address the multiple threats that an unsustainable food system poses to public and environmental health both now and in the future, a food systems approach provides an ideal opportunity to integrate sectors and demonstrate a system that can deliver a wide range of benefits under each of the Well-being of Future Generations Act’s seven well-being goals, and apply the sustainable development principle when thinking of the long term: prevention, collaboration and involvement as set out in the Act. It was heartening to see Welsh Government apply the Well-being of Future Generations Act framework to the recent ‘Developing Wales’ food and drink sector’ consultation. However, key aspects of the wellbeing goals were misinterpreted or only superficially addressed in the consultation.

Furthermore, this was about applying the Act to the Food and Drinks industry and the manufacturing and processing sectors that sit within this, but the Act should be applied to the wider food system. It is time for an explicit food system strategy for Wales that takes into account the diversity of values in relation to food, the relationships between production and consumption, and the changing power relations in the food system. We need better and more diverse links between food production and consumption by catering for the market at the same time as catering for improved healthy and sustainable diets. Whilst accepting that there is not a priori necessary direct linkage between increases in re-localisation of food production and its sustainability, we can argue that the right policies in place will re-localising our food production and consumption and promoting shorter supply chains can generate multiple benefits for the local economy, environment, health and well-being. Such an integrated policy approach would be a mechanism to build resilience back into Wales’ Food system.
3.2 The Need

So, the questions for policy makers now become more challenging and urgent, and they specifically include:

(i) How do we develop integrated strategies and actions which will shift the food system onto a more transformative pathway that can tackle poverty and generate multiple benefits for the local economy, environment, health and well-being?

(ii) How can consumers, processors, retailers and producers be encouraged to make these shifts?

(iii) How can a clear and collective vision of a future Wales food system be built, articulated and communicated both to all stakeholders and the public, such that it becomes a major dimension of Welsh Public policy?

Whilst the current Food Action Plan is one part of this, it does not provide a comprehensive Welsh food system strategy for the present and future generations. As a result, it does not meet the full demands of the Act’s well-being goals and ways of working. As noted above in section two, the current Food Action Plan needs to be integrated and embedded into a wider range of associated policy areas (including policies covered in the Sustainable Farming and Our Land consultation report and Healthy Weight Healthy Wales: Strategic Plan) to build a real and comprehensive national food system policy for Wales aligned with the Act, and more broadly the UN Sustainable Development Goals. As stated above, Wales needs a systems approach to the food system that better connects food production, manufacturing and processing, retail and consumption. A systems approach is an opportunity to strengthen the integration of social, economic, cultural and environmental considerations by considering them together across departments, rather than one department focusing, for example, on environmental considerations with less attention or understanding given to social or economic elements. Integrating the Food Action Plan into a comprehensive approach to food system policy is made more complicated by the high level of integration of the Welsh food system with the UK food system, and the current uncertainties of potential disruptions to markets and regulations associated with Brexit. As a result, Welsh food policies need to clearly indicate what Welsh Government can and cannot do with respect to food policy, and how this can dovetail with a wider UK policy. Any Wales food policy needs to recognise that many of its conventional supply chains are increasingly tied to UK processing and retailing hubs; and that Welsh consumers are hugely reliant upon UK and EU rather than just Welsh food providers. This process is exacerbated by the concentration of larger processing facilities in England and the loss of smaller local facilities in Wales, such as abattoirs and mills. Similarly, much of Welsh food production goes into UK and EU supply chains. Hence when we develop ambitious plans for Welsh food, we need to pay particular attention to collaborating and developing partnerships across the devolved territories, and indeed understanding the levels of import and export from Ireland. This should not reduce our energies and ambitions in developing a more integrated and visionary approach in Wales. Indeed, it makes the need to do this and to build a more resilient food system as part of wider systems all the more urgent and creates an opportunity for Wales to be a leader across the devolved countries.

A strategic overarching food system strategy that spans multiple Welsh Government departments would enable Welsh Government to fulfil its obligations under the Act by directly addressing the seven well-being goals. If Wales had a just and sustainable food system fit for future generations, this is what we believe it could look like.

3. Policy Context

3.1 An integrated approach: The Well-being of Future Generations Act, the seven well-being goals and the five ways of working

An integrated food system approach is not a new idea for Welsh Government. The National Assembly for Wales Climate Change, Environment and Rural Affairs Committee launched a report in May 2018 ‘Rethinking food in Wales: Public procurement of food’xxxii and Chapter 1 considered the strategic direction of food policy and asks whether an overarching food strategy is desirable and necessary. Their first conclusion states: “There is currently an urgent need for a strategic vision for the Welsh food sector which makes connections between different policy areas, such as health, wellbeing and sustainability, alongside economic growth.”

Over the past decade, Welsh Government has tried several times to address deficiencies in its food system. Most notably, Food From Wales: Food For Walesxxxiii was an overarching document published in 2010. It was never fully implemented and placed in the background by successive Ministers in favour of a more specific Action Plan that focused on Wales’ food industry sector and set up the Food Industry Board. This has been successful in increasing gross value added and employment through the food manufacturing system, but it would be unfair to view it as a comprehensive and holistic approach, or indeed as the food system strategy for Wales earlier envisaged by Food From Wales: Food For Wales: The Assembly Committees and the Public Policy Institute for Wales 2016 Food Policy as Public Policy reportxxxiv both highlight the need for a more integrated and holistic approach to food policy. Again, these have not been adopted and Ministers have responded to these calls by signalling the primacy of the Towards Sustainable Growth - an Action Plan for the Food and Drink Industry 2014-2020xxxv referred to as the Food Action Plan; and its current review with the Developing Wales: Food and Drink sectorxxxvi consultation) as the main food policy vehicle (see Minister’s August 2018 response to Environment Assembly Committee on their report on Food Procurement) xxxvii xxxviii

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

- Wales’ nature based/agroecological farming systems help restore biodiversity, aid health, help prevent flooding and keep Wales’ air and water clean
- Everyone eats more fruit and veg and eats less processed food
- Wales’ natural resources are managed sustainably with healthy ecosystems underpinning food production
- More healthy and sustainable Welsh food is supplied directly to our Welsh public sector and Welsh households
- The real living wage underpins the Welsh supply chain
- Wales’ food sector is a significant contributor to Wales’ net zero climate change target, with significant carbon stored on Welsh land
- Everyone learns about food and how to prepare nutritious meals
- A more equal Wales
- A healthier Wales
- A resilient Wales
- A prosperous Wales
- A globally responsible Wales
- Wales’ food systems help to deliver social, economic and environmental outcomes
- Wales celebrates and builds upon our Fairtrade Nation status
- Food supply chains in Wales are deforestation free
- Food is used to celebrate our heritage and Welsh language
- People come to Wales to experience our food, drink and hospitality
- Food is a fundamental part of the ‘Foundation Economy’
- Food and farming supports rural communities to thrive
- Food is used as a ‘convener’ to bring people together
- Civil society organisations, food hubs and cooperative bodies promote local food initiatives
- Everyone has access to healthy, affordable food
- Co-productive approaches shape food provision in Wales
A Prosperous Wales.

Wales’ natural resources are managed sustainably with healthy ecosystems underpinning food production. Wales’ food and farming sectors are a significant contributor to addressing the climate emergency and Wales’ net zero climate change target. Public procurement offers the opportunity to shorten supply chains, set public value criteria around environmental and welfare standards in food production, and stimulate demand for healthier and more sustainable Welsh food to be procured/supplied to the public sector and Welsh households. This creates opportunities for thriving local economies which are supported through various training routes to ensure that Welsh food system actors are able to rise to the challenge and seize business opportunities that support regional economies. The real living wage underpins the Welsh supply chain.

A Resilient Wales.

Wales’ agroecological farming systems help to restore biodiversity and soil health, prevent flooding and keep Wales’ air and water clean. Agroecological farming systems restore resilience within production systems by introducing diversity, circularity and complexity and eliminating the use of non-renewable and energy-intensive inputs. Wales’ food system uses a combination of agri-environment payments and demand-side drivers for healthy and sustainable foods. Going beyond payments for environmental services currently recognized in ‘Sustainable Farming and Our Land’, payments would also be for actions that support the achievement of NRW’s DECCA approach to improving ecosystem resilience. Agri-environment payments would recognize contributions to well-being and education goals which improve the social resilience of the system by building relationships back into the food system.

A Healthier Wales.

Everyone eats more fruit and veg and less ultra-processed food. Health strategies are integrated into a food system strategy for Wales to ensure that everyone has access to healthy, affordable food, and that everyone can learn about food, how to grow it, and to prepare nutritious meals. Positive norms to healthy foods are built into the education system. Food supply chains, set public value criteria around environmental and welfare standards in food production, and stimulate demand for healthier and more sustainable Welsh food to be procured/supplied to the public sector and Welsh households. This creates opportunities for thriving local economies which are supported through various training routes to ensure that Welsh food system actors are able to rise to the challenge and seize business opportunities that support regional economies. The real living wage underpins the Welsh supply chain.

A More Equal Wales.

A food system strategy for Wales supports a framework that ensures everyone has access to healthy, affordable food. Co-productive approaches shape food provision in Wales. The development of food citizens is encouraged, where people actively engage in their community food systems to drive culturally appropriate regional and national food systems. Culturally appropriate practices and food vary across regions and even within cities, which further points to the need for a co-productive approach addressed through citizen assemblies and other forms of citizen engagement.

A Wales of Cohesive Communities.

The food and farming sectors support rural communities to thrive, ensuring livelihoods for farming communities that deliver ecological and social well-being goals. Food is used as a “convener” to bring people together and sustainable food production becomes a key element in community regeneration strategies in both urban and rural communities. Civil society organisations, food hubs and cooperative bodies are encouraged and supported to promote local food initiatives as part of community development initiatives. Support is directed towards setting up regional training centres for sustainable food production that draw upon and bring together the wealth of knowledge of farmers and business owners through collaboration.

A Wales of Vibrant Culture & Welsh Language.

Food is used to celebrate our heritage and Welsh language. People come to Wales to experience our food, drink and hospitality. Welsh cuisine and food culture is encouraged in the food service and hospitality sectors. Food initiatives are inserted as part of Welsh language training and school curricula. Food is recognised as a fundamental part of the ‘Foundational Economy’, enabling local communities to regenerate and become more socially and culturally vibrant.

A Globally Responsible Wales.

Food supply chains are globally responsible as they have eliminated the import of commodities that are linked to environmental degradation abroad e.g. supply chains are free from soy feed and palm oil linked to deforestation. As part of this, livestock feed in Wales and the rest of the UK does not rely on resources from overseas. This is a key principle as part of business support from Welsh Government and a key principle in public sector procurement. Wales strengthens and builds on becoming the first country in the world to achieve Fair Trade Nation status as a way of demonstrating support for global producers.

A Wales of Cohesive Communities.

The food and farming sectors support rural communities to thrive, ensuring livelihoods for farming communities that deliver ecological and social well-being goals. Food is used as a “convener” to bring people together and sustainable food production becomes a key element in community regeneration strategies in both urban and rural communities. Civil society organisations, food hubs and cooperative bodies are encouraged and supported to promote local food initiatives as part of community development initiatives. Support is directed towards setting up regional training centres for sustainable food production that draw upon and bring together the wealth of knowledge of farmers and business owners through collaboration.

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A More Equal Wales.

A food system strategy for Wales supports a framework that ensures everyone has access to healthy, affordable food. Co-productive approaches shape food provision in Wales. The development of food citizens is encouraged, where people actively engage in their community food systems to drive culturally appropriate regional and national food systems. Culturally appropriate practices and food vary across regions and even within cities, which further points to the need for a co-productive approach addressed through citizen assemblies and other forms of citizen engagement.

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4. The Food System Opportunity

4.1 Overview of the opportunity

The process of developing a food system strategy for Wales needs to focus upon three clearly identified policy spheres: (i) Co-creating a new collective and transformative vision for Welsh food that has the capacity to meet today’s urgent needs outlined above; (ii) concerted actions in building infrastructure that supports integrated policy approaches; and (iii) enacting a range of interconnected delivery mechanisms at multiple spatial and organisational scales.

Given these new and demanding challenges, a new vision for Welsh food is needed; and this once agreed needs to be owned and embedded in a comprehensive food infrastructure plan which tackles and progresses all seven principles of the Act and involves investments and interventions in social, economic and environmental infrastructure. This will require a whole-government approach and as part of this, changes in governance frameworks as well as we have recently advocated in a series of briefing papers and is supported by influential reports like the recent Royal Society of Arts (RSA) food report. The RSA report advocates actions to be taken within our food system over the next ten years to recover and regenerate nature, and to restore health and well-being to both people and planet. By all means, this can also be seen as an opportunity to record food governance. We advocate establishing a new Wales Food Commission to oversee targets and performance of a food system both for people and planet. Brexit can also be seen as an opportunity to take a whole-government approach to policy making to ensure that all sectors and members of society benefit.

In Wales in 2018, 20% of people worry about running out of food and 26% of 16- to 24-year-olds surveyed ran out of food in the previous year.1 Further, the Food Foundation has shown that 160,000 children in Wales are living in households for whom a healthy diet, as defined by the Eatwell Guide, is increasingly unaffordable.2 We know that food and diet are tightly coupled to health and well-being. A National Universal Food Framework would ensure universal access to a healthy diet.

A National Universal Food Framework would engage with food producers, food hubs, schools, local authorities and the NHS to connect people to the sources of food, to nature and to each other. Building relationships back into the food system can foster positive mental and physical health outcomes,3 and promote the following ways of working of the Act: prevention, collaboration and involvement. A National Universal Food Framework can create the mechanisms to empower communities to engage with their food system so as to design and build through bottom-up participation and with facilitation support, community-based universal food programmes that utilise a capabilities approach and meet the urgent needs of each community.4

In the case of food produced locally, school children and community members could be connected with local farms and community gardens, where they would spend time with other individuals, on activities on the farm/garden to grow food. It could also incorporate community kitchens, where food products in the first instance, and secondly export markets.

In addition to a Wales Food Commission, a national framework for ensuring integration and achieving food security across Wales society is critical for transformation. We suggest that these structural changes can be created in the form of a National Universal Food Framework in the UK, we have universal health care because healthcare is viewed as a universal right that everyone should be able to access. The UK has ratified, and is therefore legally bound by, the ICESCR including the human right to adequate food.5 Therefore, the Government is legally required under international human rights law to secure the human right to adequate food for everyone in the UK.6,7 By reforming the national Food Act into a ‘Right to Food’8 defines the right to food as: ‘the right to have regular, permanent and free access, either directly or by means of financial support, to quantities and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental well-being of the individual and collective, fulfilling and dignified life free of fear.’

We acknowledge that there is also now an Implementation Board for the Healthy Weight, Healthy Wales Obesity Strategy in Wales and also of Food Standards Agency (Welsh Food Advisory committee).

4.2 A Transformative Vision

It is instructive to re-visit the collective vision proposed in the Food for Wales; Food from Wales strategy, such as food procurement and how this can be harnessed in order to meet regional development and food security programmes. All of the evidence shows that food insecurity for the Welsh population have increased over the past decade. Some may be critical of vision statements, but we wish to argue that this is an urgent and important requirement if we are to re-set and develop a sustainable, restorative and transformational agenda for Welsh food.

A new and ambitious vision needs to be created to attract policy leaders, civil society and the business community through practices of co-production and joint working. In fact, five of the ways of working in particular, involvement, integration and collaboration, there is a legal mandate to engage with as wide a range of actors within the food system as possible to build this vision. As everyone is a consumer, this means engaging with the wider public in the process, for example through citizen assemblies, and ensuring that the resulting vision reflects the identified priorities and builds upon their lived experiences. In this way we also support the development of food citizens and the need to build stronger and more engaged communities.

It is important that this vision is then communicated inside and outside of Wales, and especially to the changing nature and role of the Westminster government. While this strategy should be co-created, there are a number of broad themes relevant to promoting ecological and social economic sustainability and resilience. We need to better link food production and consumption strategies in Wales, by catering for the market and catering for healthy and sustainable diets. We should be looking at what we can sustainably produce and sell in Wales, tailoring this to market demands and consumer trends, and identifying domestic market opportunities for these products in the first instance, and secondly export markets.

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Building local supply of healthy, sustainable and accessible food:

(i) Agroecological farming: Given the climate and biodiversity crisis, Wales agricultural sector has to incorporate its ecological foundation. We recommend that Wales makes a transformation to an agroecological farming region by 2030. Agroecological applies ecological concepts and principles to food production practices, managing interactions between plants, animals, humans and the environment for food security and nutrition. Agroecology integrates circular and regenerative approaches to the natural resources in the system, maintaining and regenerating essential nutrients in the system. They rely on the diversity of biological organisms, from the plants grown and harvested to the insects both in the ground and above ground that facilitate an environment conducive to growing crops. Agroecological approaches focus on soil health and preservation and natural inputs (sun radiation, air, water and nutrients) optimisation. The diversity of practices with an agroecological system creates a robust and resilient system that is less vulnerable to international market dynamics of input (synthetic fertilizers, pesticides and seeds) and price and availability. The use of synthetic fertilizers not only contributes to climate change, but they disrupt the natural balances in soil-based communities; reducing natural fertility functions. Biodiversity further supports the natural balance by killing broad populations of insects and other animals that often provide beneficial services for the farming system. Agroecological approaches emphasise ecological knowledge and skills to respond to the dynamics of the natural system and understand best practices for achieving ecological balance, which creates high functioning and productive systems. Agroecology relies on on-farm natural resources and a deep understanding of the farming ecosystem, with a strong focus on participatory action research to achieve context-specific and socially accepted innovations within farming systems. It requires a multi-stakeholder approach bringing together agriculture, environment and social perspectives.

(ii) Resilient Wales: Farming practices can be used to ensure increased biodiversity as well as the production of nutritious food. Slade Farm uses cyclical nutrition and fertility building within the farm to provide a definitively sustainable system within no external inputs. The system is supported via management practices such as areas of permanent pasture, spring sown cereals, and hay meadow maintenance. Taken together these practices ensure the maintenance and growth of biodiversity above and below ground.

(iii) A more cohesive Wales: Using farms as a ‘place’ provides the opportunity to engage communities in food production and nature. Slade Farm has regular public events to showcase food production and runs a small Community Supported Agriculture scheme. This brings the local community together and creates both bonding and bridging social capital as well as reconnecting people to the land.

(iv) A healthier Wales: An overwhelming driver of poor outcomes in health and nutrition is the level of processed foods consumed. Slade Farm connects people to primary products through local supply of meat and vegetables. This creates the micro opportunities within households to make different choices. The shape of our food system influences our behaviour patterns; changing its shape can have positive consequences for health and nutrition. Wales has an opportunity to enhance the benefits of regenerative agriculture within its food system. It is clear that when such practices are in place they provide enormous public and common goods that contribute directly to a better Wales.

(v) Agroecological farming skills: Supporting agroecological approaches to food production requires a more connected and comprehensive training and skills landscape for sustainable food production and the wider food system that links food and farming organisations, urban and rural production and the network of further and higher educational institutions. The ‘Sustainable Farming and Our Land’ consultation, the ‘Developing Wales’ Food and drink sector consultation and the Healthy Weight Healthy Wales’ strategy all incorporate support and action points to address the skills gap at various points in the food system. An overall vision could include incorporating school curriculum in supporting these objectives. Food policy in Wales has already taken innovative steps to support networking and connecting actors in the food system by establishing the Food farming and environment network in 2013; establishing a winners committee to support skills development within the food sector. Continued support can be directed at setting up regional training centres for sustainable food production that draws upon and brings together the wealth of knowledge of farmers and businesses owners through collaboration. These centres could support new co-operatives and co-operative ways of working as well as enabling accreditation and/or financial support for farmers wanting to deliver training and training programmes. Case study illustrates ways in which informal training has already occurred and could be increased in numbers with financial incentives.

Long-term core funding similar to that provided to farmers for environment and biodiversity benefits could be provided by Welsh Government for training and support for new and existing sustainable food co-operatives, community food hubs and community food centres. Advice and further education on both co-operative ways of working and co-operative legal structures tailored to the food sector would be available to businesses regardless of size or turnover, embedding co-operative education within Welsh educational policy and business provision services. Training and skills would be available to connect to nutrition and cooking throughout the education system (from early years to university and adult education). Programmes such as the Nutrition Skills for Life and the School Holiday enrichment seek to achieve these objectives in certain communities. Schools should be linked to farms and urban community gardens, where hands-on learning about the source of food creates a foundation for food skills for future generations. This is already being achieved by the Soil Association’s Food for Life programme, ‘Tasty Careers’ and the Welsh Government’s Skills Hedge, creating a model for Welsh Government to scale across society.

Further training can be achieved by creating centres for training and R&D extending and developing the existing food technology centres networks so as to meet the Welsh Government’s Food Action Plan target of attracting 6000 new entrants into food manufacturing by 2025. This number needs to increase when we consider the food hospitality sector; farming and especially horticulture, and product marketing. The centres would be demonstration hubs of best practice.

(vi) Horticulture promotion: Scale out small-scale horticultural production in Wales through widening access to land and training of new entrants and business advice, especially for producers in the small and startup diversity challenging Welsh horticulture in Wales has been in long-term decline with fewer than 3500 hectares now under cultivation for potatoes, field vegetables, small fruit and commercial orchards, compared with double that amount forty years ago. Innovative schemes that are targeted at growing the market opportunities for these products, most easily through procurement policies, coupled with greater knowledge exchange, could help to incentivise new and innovative production in Wales. In order for Wales to produce the amount of fresh and vegetables required to meet nutritional recommendations of five servings a day, 2% of Welsh land area would be required for production. Aiming for 2% of land area to be dedicated to horticultural production could form a policy tool within both health and land management strategies in Welsh Government.

According to research into the barriers to increasing horticultural production in Wales, perceived barriers were the challenging of securing the circle and how to make a living from selling fruit and veg at the same time as producing an affordable product. Lack of horticulturist in the system; training and labour issues; lack of research and development; the constraints of seasonality versus desire for exotic; and fruit and veg culture of fruit and veg consumers; marketing of fruit and veg and the system’s ‘chicken and egg’ challenge in terms of whether to increase consumption or production first. Overlifting all these barriers is a divergence within the sector over the general lack of policy direction and vision which in itself has been a barrier to development.

The Pathways to Farming project (see case study 4 below) in North Powys is an example of a project working to increase horticulture production in Wales and create new markets for local produce.

Case Study 2: Slade Farm - A Mixed Organic Farm in South Wales

For much of the last 50 years we’ve been moving towards easily consumed food with permanent availability. For farming that has meant predictability of supply leading to specialisation, intensification and consolidation. This is at odds with the natural system, which depends on diversity, and it also creates an imbalance of power between supply chain producers and buyers.

A Resilient Wales

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Case Study 3: Cae Tân

Community supported agriculture (CSA) is an approach to farming where the responsibilities, risks and rewards are shared between growers and members. Cae Tân is a grower-led CSA meaning decisions are guided by the growers and supported by the members of the CSA who pay for a share of the crop in the form of a weekly box of vegetables. There are currently 120 members of the Cae Tân CSA who pick up their weekly vegetable box from a local hub. Cae Tân aims to help establish new growers and build local produce availability. Currently, the head grower and assistant grower manage farm operations, supported by an apprentice and a number of volunteers.

Through the CSA model, Cae Tân are creating a range of opportunities for new entrant growers including training and employment. Over the last four years, two apprentices have moved on to secure employment in horticulture; one has become assistant grower at Cae Tân and one has set up a small growing social enterprise. As a practitioner and grower working towards setting up a sister CSA in the Swansea area.

Alongside their apprenticeship scheme, Cae Tân runs a Sustainable Schools Programme where primary school pupils from five schools in the Swansea area are learning about sustainable farming.
Case Study 4: Pathways to Farming

Pathways to Farming is a Mach 50tioon project working on increasing the number of horticultural food producers in North Powys and creating new markets for local produce. The project is working with 12 trainees in the Machynlleth and Newtown area, teaching them the horticultural skills needed for commercial food production and mentoring them to grow on small scale ‘microfarm’ plots. The idea is that these trainees will move on to scale up in the future using the business plans they are writing as part of their training.

The project is working to develop new markets and new selling models that will enable more locally grown food to be sold. The project will meet its aims by running a five-step programme:

1. EVENTS: to promote local food and engage more people in growing and eating it.
2. VOLUNTEERING: offering volunteer opportunities to people interested in gaining experience in sustainable food production.
3. MICROFARMS: developing new microfarm® sites on which new entrants to horticultural food production can test their ideas and gain experience.
4. VOCATIONAL TRAINING: developing a new accredited training programme in sustainable horticultural food production.
5. NEW MARKETS: creating new markets for locally produced food, including food hubs and new cooperative selling models.

The project has developed exciting partnerships. In Machynlleth the Centre for Alternative Technology has offered land, project support and shared vision, while in Newtown the project has partnered with the community growing organisation Cultivate to share their community garden and their vision for a more resilient food system.

Building the local market for healthy, sustainable and accessible food:

(v) Local food procurement: Welsh local and regional public procurement of foods is a key aspect of Public Service Board well-being plans. Link this up to a network of sustainable food hubs, and regularly monitor this through the Public Service Boards. As an example and as stated above, one of the barriers to increasing horticulture production is the need to stimulate demand for fruit and vegetables grown. Procurement has the power to create the demand for greater horticulture and edible crop production in Wales for Welsh consumption. The increase in demand can support policies to encourage producers to transition towards agroecological production practices and more diverse production systems. The Carmarthenshire pilot Foundational Economy project xvii on local and regional food procurement should be extended to all Welsh Local Authorities, recognising the differences between urban and rural areas.

(vi) Sustainable food hubs: Invest in developing a network of sustainable food hubs (businesses that aggregate and distribute local food) in rural Wales and link farming support to making transitions and convergence to agroecological practices. According to a 2018 survey of UK food hubs, they often cooperate within an explicit ethical framework and fill gaps in local food infrastructure, help consumers find locally sourced produce, support new forms of food retail, include food enterprises, and/or create a space for community education and action xviii. Food hubs have been estimated to have a gross output multiplier of 1.75 and an employment multiplier of 2.14.xix An integrated policy environment within Wales needs to recognise the vital link between sustainable and just food, vibrant culture, and the health and well-being of future generations. This requires a Wales-wide action plan that catalyses local food economies through development of co-operative food hubs and community food centres. Co-operative food hubs can support producers through co-operative processing and distribution enabling resources and access to Wales-wide retail and procurement outlets. Community food centres can be spaces for diverse communities in Wales to come together to access healthy, local and affordable fresh produce, foster vibrant food cultures, educate about co-operative values and principles and catalyse local food innovation and enterprises. Together co-operative food hubs and community food centres can cultivate co-operative Welsh food economies and empower communities to achieve sustainable and just food futures.

(vii) Food cooperatives: Further long-term investments in setting up food cooperatives at all levels and scales, so as to increase the density of cooperatives across Wales. Link cooperatives to the development of food hubs, which stand to play an important role within the National Universal Food Framework with respect to design of community-based universal food programmes.

(viii) Digital markets: Embrace and develop digital food markets and supply chains, linking consumers with producers and food hubs, as part of the development of the foundational/circular economy in Wales. Such digital tools already exist, for example in the Open Food Network (OFN) (see case study 5 below), which can also make market data open source and publicly available, assisting producers, cooperatives and food hubs in making cultivation decisions. The OFN is a global network of people and organisations working together to reconnect producers and consumers by developing open and shared resources, knowledge and software to support a better food system in the form of an open source software platform that makes it easy to create innovative, independent community food enterprises. xx Such a tool would support the design of community-based universal food programmes and illustrate that the tools needed to achieve such programmes already exist.

Case Study 5: Open Food Network

The Open Food Network is a platform co-operative supporting the development of hubs for local food distribution. Members include food producers and food hubs and shops. Via the online platform, producers can sell to other shops and hubs as well as direct to consumers; wholesalers can manage buying groups and supply food hubs; communities can set up food hubs enabling trade and distribution within the local community.

Currently, over 1,000 producers and around 60 community enterprises running local food hubs are registered on the Open Food Network UK. Open source software supports the distribution of local food via food hubs. As a model of co-operatively managed software, all members collectively own the software and data. According to Nick Weir (Open Food Network):

“OFN shortens food supply chains — giving as much of the value to the producer whilst making food as affordable as possible to the eater.” (OFN)
Promoting the Welsh Brand for healthy and sustainable food:

(a) Quality food standards: Protect, build upon and air for higher food standards; maintain the current EU GAP/PGO/recognitions and extend them. This is particularly important to protect, given the need to distinguish quality food standards across the UK as well as within Wales. These standards should include sustainability criteria in addition to point of origin and build on the work that Welsh Government has already achieved through the Good Taste Awards, for example.

(b) Promote Welsh Food in a British Isles context: Reformulate in the context of Brexit, a proactive export strategy most central in the UK and link this explicitly to the Welsh Tourism Board and the development of Welsh cuisine in the UK market. Major confusions currently exist regarding the future of designated protected area brands in Wales and the rest of the UK as part of Brexit trade negotiations in 2020. There will also be a growing need to export nutritious food across the UK, with particular attention to making it accessible to low-income households. There is considerable market potential for nutritional and agro-ecological food grown in the UK.

This vision should be delivered through targeted and redirected funding packages, including post-Brexit funding for farming and regional development. The Wales Farming and Food Infrastructure Investment Scheme would provide a mechanism to fund such development, and the Welsh Government needs to promote its new food policy as a major public policy for developing and delivering sustainable food security for all.

4.3 Infrastructures: re-building sustainable food provision

These transformations will require changing the shape of our food infrastructures to address physical, economic and governance variabilities. In many ways, food infrastructures need re-building. Many scholars have talked about the prevailing missing middle in sustainable food supply chains. To support local supply chains and re-tooling the distribution of power, infrastructure is needed in towns and the country to link food producers to consumers in more diverse ways. This means more sites for food markets, community retailers and food processes; investment in local food network value chains; and sufficient robustness in regional and national food supply chains.

This is also important to the development of a sustainable and resilient food system for Wales. We know people and their communities care about food; we also know that people are increasingly demanding actions on the part of governments to act to create safe and nutritious ways of feeding the population. The food system has to be pointing in the same direction based upon the collective vision in this report. This paper argues, than a ‘ticking box’ exercise associated with different frameworks and agendas. Developing a food system strategy for Wales as part of National Food Framework needs to take the lead. It means developing a collaborative and coordinated action to steer the future of this crucial element of our national life.

4.4 Delivery Mechanisms

To realise the new food vision for Wales and build the necessary infrastructure, an integrated set of policies and funding mechanisms need to be developed. Public Sector Investment Plans and Well-being Assessments, Natural Resources Wales’s Area Statements and the school curriculum should be key vehicles to deliver sustainable food production and consumption.

Any post-Brexit agricultural and land management policy needs to support farmers to make the necessary transitions towards sustainable land management. Welsh Government’s Sustainable Farming and our Landcare will be critical to this success of work. Landcare and land managers for delivering environmental public goods, such as biodiversity conservation, water and air quality. However, in addition to this, any post-Brexit agricultural and land management policy needs to support farmers to make the necessary transitions towards sustainable land management. Enabling changes to agricultural practices needs to be a central part of Wales’ post-Brexit agricultural and land management support mechanisms, and these need to be linked to wider policy agenda over the longer term. There is no reason why farming should be seen as outside of this policy arena of Welsh economic policy.

A new Wales Food Commission should be established to oversee the development of the new food strategy, comprising the Future Generations Commissioner, Area Statement leads, education and public health boards, Welsh Government leads on food policy (including agriculture, procurement and health and social care) and food practitioners (including community based organisations and environmental NGOs).

We also recommend, as highlighted above, creating a National Universal Food Framework to ensure all Welsh people have the right to access healthy food.
Experts agree that there needs to be a "radical rethink of business models, food systems, civil society involvement, and national and international governance" to address the interlinked crises of obesity (Doc and Commission on Obesity 2018) and a climate change (IPCC 2019) and land and ecosystem degradation and biodiversity loss (State of Nature 2019).

Endnotes

i. The Food Foundation, Affordability of the UK's Eatwell Guide, September 2018

ii. Natural Resources Wales, The State of Natural Resources report, 2016

iii. Natural Resources Wales, The State of Natural Resources report, 2019


vi. Natural Resources Wales, The State of Natural Resources report, 2016

vii. Natural Resources Wales, The State of Natural Resources report, 2019


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