BUILDING FOOD SYSTEM RESILIENCE

For the Government of Jersey

Publication date

November 2024

HYPHA

REGENERATIVE DEVELOPMENT
CONSULTANCY

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EXECUTIVE SUMMARY

HYPHA was engaged to investigate the resilience of Jersey's food system, and provide recommendations to ensure its future sustainability. Following the Government of Jersey's decision to invest in the rural economy through the Rural Economic Framework, this report will guide ongoing support by analysing local supply chain functionality, **addressing the complex realities to unleash productivity across the local food system**, and providing accountability and context for future decision-makers.

This report does not advocate for complete "self-reliance" or a 100% local food system, nor does it idolise a particular farm practice or food outlet. Instead, it presents the idea that ensuring **the supply of healthy food and building long-term food resilience should be moral imperatives for any government and all stakeholders in the food system**. It emphasises that all types of food organisations and initiatives play a crucial role in achieving long-term resilience.

Investment to minimise the healthcare costs associated with an ageing population and diet-related reduction in health span is essential to future-proof the island's economy. More than 4,000 people in Jersey already have type 2 diabetes and one more person becomes diabetic every day.[1] Caring for the island's natural and productive landscapes are also strategic priorities related to food that contribute to social and economic well-being.

The **unintended consequence of the current food system places a significant burden on the government's finances,** encompassing health-related expenses, infrastructure and waste costs, and social exclusion. This report underscores the complexity of the issue, highlighting the need for system-wide structural adjustments. However, it also points out that adjustments in the food system can lead to cost savings and increased overall productivity in the long run. The report also stresses the

[1] Diabetes Jersey; https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/Disease%20Projection%20Report%202023%20to%202053.pdf

importance of a collaborative approach involving various stakeholders to address these challenges effectively.

We identified substantial gaps in the local food system, showing that segments of the food value chain rely on informal communication and poor information. In order to establish connections between local producers for local markets, we uncovered missing pieces of critical infrastructure and human capital. The lack of clear pathways to local markets and resolvable legal and policy barriers hinder optimised local production, access to market opportunities, and material use efficiency. The supply of local food for local markets is inhibited by a historical focus on export markets with the consequent emphasis on growth, efficiency and economies of scale.

Jersey has a rich history of innovation within food, farming, and hospitality businesses, which have all contributed to the development of the island economy. The report identified that the local food system holds enormous potential for boosting market productivity and alleviating the public costs associated with diet-related ill health. This shift will require creative innovation and investment into shared resources, community ownership, and impact-led business models.

This report defines food system resilience and analyses the long-term trajectory in Jersey. We then develop a variety of integrated strategies that connect across policy areas to guide the food system into delivering on targets outlined in the Jersey Performance Framework. For effective long-term and preventative planning, **it is essential that every department within the Government of Jersey acknowledges their direct or indirect impact on the food system**.

The process is based on comprehensive stakeholder engagement involving over 50 interviewees, with whom we explored barriers and opportunities across the food system. The interventions highlight that Government can improve local food system functionality by: implementing appropriate regulation that enables resilience; collaborating better between departments; influencing the private sector; investing in infrastructure; developing innovative partnerships, and by using a systems approach in decision-making.

We include recommendations for industry, offering a range of commercial, cultural, and community opportunities that align with the purpose of creating a resilient, thriving local food system.

KEY FINDINGS

Although the food system continues to supply Jersey with food, there are clear gaps where the resilience of the system could improve.

- **People want to tackle root causes**, not symptoms, to have more impact. Stakeholders have broad perspectives, deep knowledge and expertise within their own areas, and are willing to work in a cooperative way to generate better outcomes for health and society.

- **Potential for improved productivity.** Jersey has untapped potential to improve productivity in local markets while addressing complex social challenges (e.g. diversified economy, diabetes, obesity). Food as medicine or food as prescription presents a powerful opportunity to make this shift. In this context, productivity is understood indirectly: healthier people, living longer, more active lives, directly impact economic productivity and reduce long-term costs to society.

- **Food is a catalyst for health.** Food is a cross-cutting lever, affecting health, economy, culture, land and community. There are opportunities to mobilise more businesses to design around health, and to improve the agency of individuals to generate good health outcomes. Millennials will face a 169%[2] increase in dementia cases compared to current levels, and Gen Z could see a rise of 250%. Dementia is deeply influenced by food choices[3], and establishing new, health-focused markets to address these outcomes presents a significant opportunity for farmers working within communities.

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[2] Jayne Sibley, “Sibstar Dementia Presentation at TEKEX 30," October 17, 2024, TEKEX 30 Event, Sibstar.

[3] Alzheimer's Research UK, *Diet and Dementia Risk*, https://www.alzheimersresearchuk.org/dementia-information/dementia-risk/diet-and-dementia-risk/.

- **Every policy area influences food and farming resilience.** Planning and Environmental Health policies are extremely powerful influences on food resilience. Jersey's regulation is generally progressive and the people interviewed within regulatory departments are committed to support the island's future. However, there are a few distinct and fixable areas that create overwhelming and unfair obstacles that undermine food system productivity and resilience. **Every department needs a food resilience strategy that is enabling, rather than restrictive, regulation.**

- **Opportunities for impactful interventions.** Partnership approaches to launch a Food Foundation and more allotment spaces would have wide-ranging positive impacts across the Jersey Performance Framework. The proposed Food Foundation addresses resilience in all aspects of the food system, while expanding allotments directly contributes to our ability to engage with and eat our own food.

- **Multiple perspectives and accountability.** Broad and deep stakeholder engagement is needed to unearth a variety of perspectives that contribute to policy development. Voices representing the future, as well as the past and present, are needed to design resilient futures.

- **Capturing co-benefits.** The Rural Economy is the entry point to local food and its sphere of influence. To maximise the benefits from public investments, the objectives of the rural grant scheme should align with the public interest. Businesses can then direct their individual commercial efforts towards collective positive outcomes and innovative collaboration.

- **Innovation and Jersey's competitive advantage**. Jersey has a competitive advantage due to its concentration of connections, which uniquely enable systemic approaches to solving food-related problems. It should not be difficult to make the production and sharing of food successful in Jersey. The innovative Rural Economic Framework is being adopted by Alderney and was recently recommended by the Chairs of Wales Net Zero to the Welsh Government for their food resilience strategy..

- **Small-scale inclusion leads to long-term resilience.** Resilient business models are successful when they use scale-linking, which connects small-scale producers with larger parts of the supply chain to enhance long-term resilience. Scale-linking spreads risks across multiple entities, making it resilient to market fluctuations or disruptions.

- **Local food is structurally marginalised.** The current food system in Jersey is fraught with technical lock-ins that systematically inhibit local food loops. The modern system is designed for efficiency and to eliminate diversity (which is seen as inconvenient), resulting in a reliance on a few consolidated suppliers, with no redundancy or ability to adapt. Technical lock-ins and barriers include:

    - **Access to land.** Securing long-term tenancies or purchasing land is challenging for new entrants due to high prices, limited availability, and lack of organised communication. Jersey could adopt innovative mechanisms (from Scotland, Wales, and France) to enable access to affordable housing and active farms.

    - **Critical supply chain infrastructure.** Food hubs and middle-layer aggregators are essential to connect growers with retailers and wholesalers, and to smooth administrative processes. Common ownership in certain aspects of the supply chain could ensure the long term viability of critical public services that enable the flow of local food.

    - **Investments in local food processing.** Processing facilities allow value addition to farm products, circular waste streams, product innovation, and increased startup business opportunities. Approaches to shared infrastructure need to be developed if the farming industry is to transition towards a more resilient future.

    - **Consumer choice.** Cheaper food is not a priority for every consumer, however, convenience is a key driver of food choices. Better routes to market for local food must be designed to enable convenient access for shoppers.

- **Purchasing autonomy.** Most supermarkets and convenience stores are linked to UK supply chain contracts that are difficult to connect with local supply. There are varying levels of autonomy in purchasing decisions, with few incentives to purchase from local producers.

- **Seasonal produce.** Jersey produce is often cited as being too expensive, yet businesses are often willing to pay more for out-of-season produce and for specific items to fulfil a planned menu. Good pricing information for local produce is not available so businesses cannot plan for local food, even when the price may be right.

- **Supermarket lock-ins.** Some partnerships between local growers and supermarkets have produced successful consumer-focussed products. However, the combination of stringent standards and the need to compete on price with the global market commonly makes supermarkets non-viable for local producers.

- **Agricultural education and career pathways.** Jersey needs more rewarding apprenticeships, educational training, and career pathways in agriculture and horticulture. It is very difficult to enter the industry, despite the clear need for a variety of skilled and unskilled roles. Diversifying job and apprenticeship opportunities will contribute to productivity, retain more young people, and open up a trainee labour market.

INTRODUCTION

Jersey has a long agricultural history and has protected the sector in times of need. Living on an island makes food security an acute issue and can lead to vulnerabilities resulting from geopolitical tensions and environmental factors. COVID-19 led to a rethink of the rural economy, and along with many other governments, food security and resilience were at the forefront of the debate. Re-localising and building long-term resilience into the rural economy is a complex task, with each sector and business type requiring a nuanced approach.

In December 2023, the Council of Ministers unanimously voted to support producers in Jersey's rural economy with a policy built on a comprehensive framework that includes all scales of farm and land-based operations. The Rural Economic Framework (REF) 2022 embeds all aspects of Jersey's Performance Framework, leading to an expanded definition of rural activity from "bona fide farmer" to also include small-scale enterprises that can be rewarded for social and environmental returns, increased cropland biodiversity, social education and local markets. Jersey is one of the only governments in the Global North with a policy to support all scales of producers, from one vergee community projects to industrial export-focused producers, as well as local market incentives.

Different actors across the food system are beginning to acknowledge and orient towards local diverse markets. This includes hospitality establishments seeking to create marketable unique selling points (USPs), Public Health highlighting that access to local agro-ecological food serves as a systemic solution to public health issues, and large retailers turning to local producers in times of crisis to fill empty shelves.

In previous research conducted by Jersey Business and independent reviewers, Jersey producers have been found to face a myriad of structural barriers, leading people to perceive them as non-competitive, too expensive, and inconvenient for modern life. However, a survey conducted by Genuine Jersey highlighted 77% of consumers consider quality as more important than price when purchasing food. Furthermore, there is a growing body of research that shows that deglobalising food economies by building resilient local food systems drives down the cost of many types of food,

prevents food shortages, builds prosperity, while also decoupling nations from geopolitical problems and resource conflicts. Environmental and social outcomes are regulated by the Key Performance Indicators (KPIs) associated with the Rural Economic Framework, rather than merely by shortening supply chains which should not be viewed as the only solution.

The objective of the Rural Economy, as defined for the purpose of this report, is to facilitate activities and enterprises that align with broader government goals; enhance the island's capacity to produce and distribute food locally; reduce reliance on imports; improve the health and well-being of islanders; and mitigate the risks of climate change, environmental degradation, and geopolitical tensions.

The Rural Economy recognises that food is inherently commercial and community-based, and that resilient solutions often emerge from the community, rather than government. With a light-touch approach, it seeks to act as an enabling partner to stakeholders within the rural and wider community. Therefore, it is imperative to identify existing businesses and community organisations that are already making significant contributions to the food system and to provide them with the necessary infrastructure and support to further enhance their impact and agency.

METHODOLOGY

HYPHA uses a systems thinking approach to weave together a picture of Jersey's food system. Systems thinking identifies patterns and behaviours across systems and over time, revealing fundamental barriers, structures, and policies.

We aim to challenge the basic assumptions that shape the food and farming sectors, and can inhibit the flow of information, human capital, money, agency, and imagination. By understanding structures, the team aimed to leverage untapped potential, and create collaborative, long-term solutions to recurring problems within our food system.

Our methodology combines mapping, indicators, and interviews to generate both quantitative assessments of the food system and detailed analyses of case studies. Insights were drawn from over 100 reports and articles and 50 stakeholder interviews across the food system. We critically evaluated the success of historical, local, and international businesses in improving local food systems.

Particular attention was placed on examples of positive deviance to identify resilience-enhancing strategies and bright spots of resilient practice. Positive deviance is based on the observation that in every community, certain individuals or groups use novel behaviours and strategies to find better solutions to problems which can also work elsewhere.

The results include a comprehensive list of strategic insights and opportunities, highlighting the significant impact small interventions can have on the entire system. Outcomes in the food system depend on activities, which only change in response to drivers (opportunities or threats). We explicitly acknowledge the difficulty of predicting and projecting the impact of interventions on all parts of the food system and have built in diverse stakeholder engagement to help identify alternative future developments.

Our recommendations seek to foster connections among stakeholders and innovative partnership opportunities. From a business perspective, this approach aims to achieve good outcomes through practical and economically viable solutions, rather than relying on philanthropy.

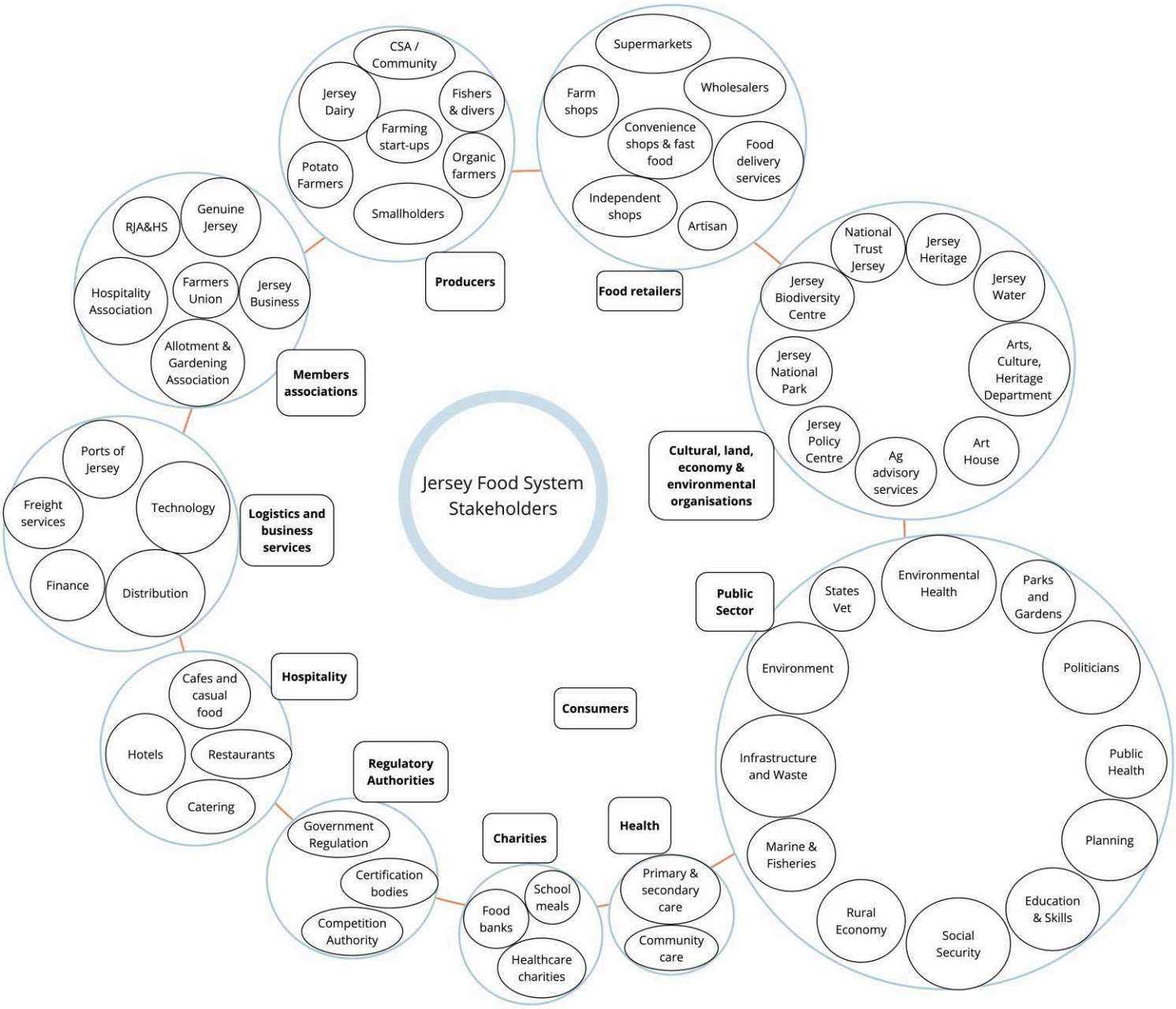
UNDERSTANDING FOOD SYSTEM RESILIENCE

DEFINING A FOOD SYSTEM

A food system is a complex network that includes all processes, actors, and activities associated with food production and use, spanning growing and harvesting to transporting, consuming, and disposal. It encompasses the broader food environment, from markets and trade to policies and innovation, as well as the influences of diverse cultures and perspectives. Moving beyond the physical aspects of food production and distribution requires a holistic view of the interconnected relationships between food, farming, health, social justice, and ecological stewardship.

A food systems approach considers both the way food is produced and its (perhaps unintended) far-reaching consequences. In addition to being system-oriented, the Jersey Rural Economic Framework also considers the provision of public goods by elements of the food system, and will reward businesses who steward our shared resources.

For most of human history, there was enormous variability in our diet. Thousands of crop species adapted over centuries to a particular environment and farmers saved locally adapted seeds, which were passed on over lifetimes. Recent agricultural modernisation has reduced diversity to a fraction of what existed before, and led to the rise of agrochemical supported monocultures. The majority of all the food we eat comes from nine almost identical crops and a handful of livestock genetic lineages, setting in motion one of the greatest extinctions on earth.



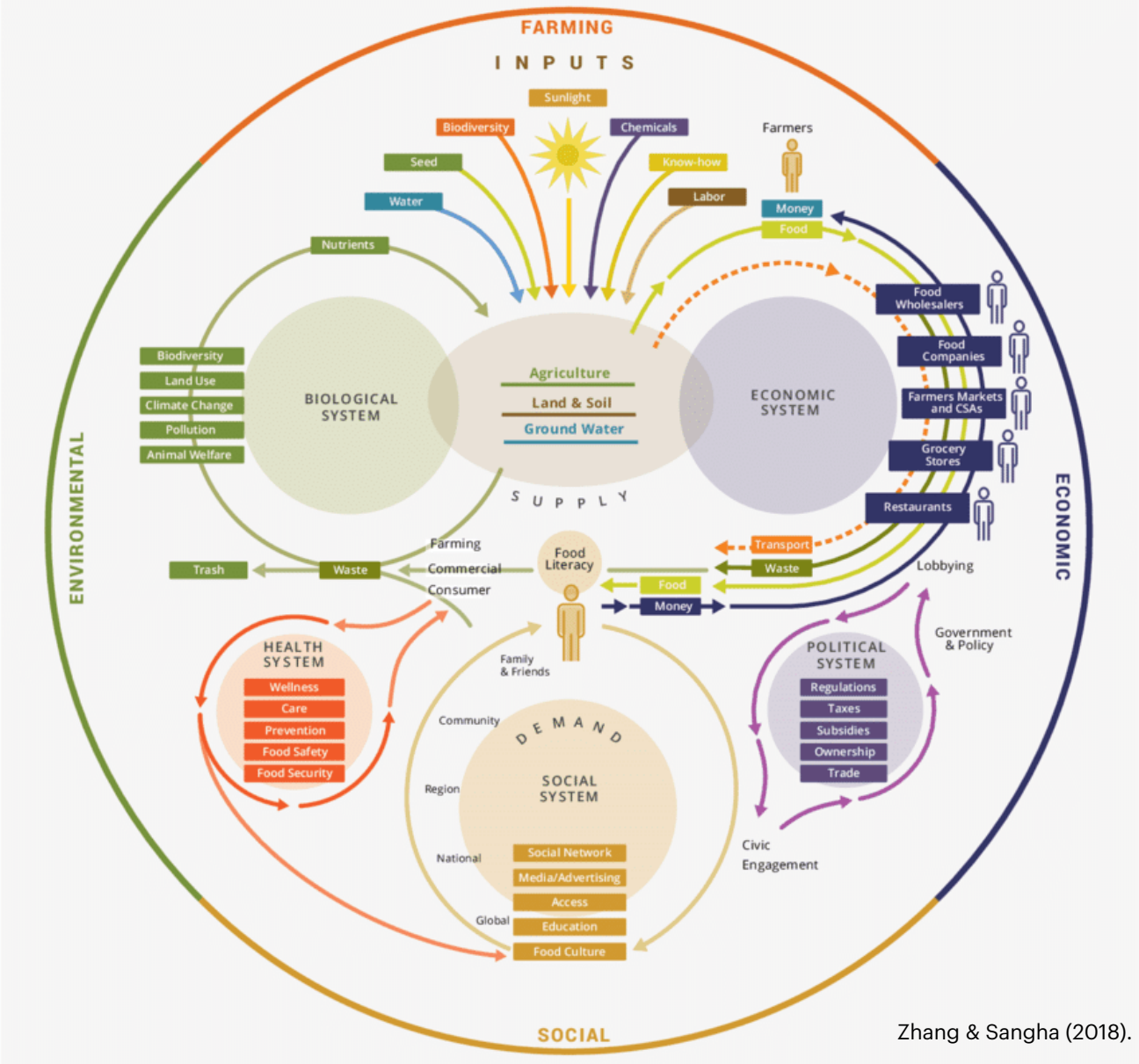
Stakeholders involved in the Jersey Food System.

Since World War II and the Green Revolution of the 1950s and 60s, a production-focused global system has dominated food and agriculture to produce massive reductions in the labour involved and price of food. This occurred at the cost of ecological devastation and the rise of food poverty, obesity, and diabetes in nearly every country in the world. The issue lies not in the quantity of food produced, but rather in its uneven distribution, consumption, and wastage within the globalised economy. *How can we maximise the number of people fed, provide the highest quality food, minimise costs for consumers, and ensure the highest wages for workers?*[4] To answer this, we must consider the desired outcomes of a well-functioning food system, which include:

[4] India Hamilton, PhD diss., University of Glasgow, 2024

- the production of sufficient, safe and healthy food
- the equitable distribution of costs and profits
- being adaptable to climate change
- the sustainable use of land and natural resources, ensuring their replenishment for future generations
- the context of different perspectives and worldviews
- economic productivity and local job creation
- proliferation of diverse businesses and organisations operating within local and regional economies
- improved overall health, wellbeing and lifespan of the population

The diagram below represents the components included in a food system which we explore in Jersey in Section II.



Zhang & Sangha (2018).

FOOD RESILIENCE

Resilience is understood to be the long-term capacity of a system to manage change and continue to develop[5]. Specifically, food systems resilience can be defined as the capacity of the food system to provide sufficient, appropriate and accessible food over time, despite disturbances or shocks.

Resilience versus security: an important distinction

A deeper examination of resilience raises a critical question: does recovery mean returning to the previous state or moving towards something new? The predominant approach to food resilience is more akin to food security, which assumes that it involves restoring the existing status quo and is only the concern of emergency planning services. A narrow perspective on food security prioritises short-term production maximisation and increasing yields, a policy rooted in national defence strategies. Processors and supermarkets aim to establish extensive, just-in-time supply chains dominated by a few major players.

The 7 characteristics of a resilient system are:

1. **Capacity for social self-organisation** - the social components of the agroecosystem are able to form their own configuration based on their needs and desires. Systems that exhibit a greater level of self-organisation need fewer feedbacks introduced by managers and have greater adaptive capacity. A resilient system should have relative autonomy from global influences and exhibit a high level of cooperation between individuals and local institutions. A system cannot be entirely autonomous, but it can strive to be less vulnerable to outside forces.

2. **Ecologically regulated** - a greater degree of ecological self-regulation can reduce the amount of external inputs required to maintain a system, such as nutrients, water, and energy. Responsible use of resources encourages a system to live within its means. This creates an agro-ecosystem that recycles waste, relies on healthy soil, and conserves water - creating physical resilience to disturbance.

[5] https://www.stockholmresilience.org/download/18.10119fc11455d3c557d6d21/1459560242299/SU_SRC_whatisresilience_sidaApril2014.pdf

3. **Appropriate connections** - connectedness describes the quantity and quality of relationships between system elements. A large variety of many flexible connections imparts diversity and flexibility to the system; a small number of very strong connections imparts dependency and rigidity.

4. **High diversity and optimal redundancy** - diversity does not simply refer to variety, but includes balance (how many of each element), and disparity (how different the elements are from one another). Important elements that may exhibit diversity include: genes, species, landscapes, cultural groups, livelihood strategies, and governance institutions. Diversity buffers against perturbations (insurance) and provides seeds of renewal following disturbance. Optimal redundancy occurs with critical components and relationships within the system are duplicated in case of failure. Redundancy may decrease a system's efficiency, but it gives the system multiple back-ups, increases buffering capacity, and aids long-term renewal.

5. **Exposed to disturbance** - the system is exposed to discrete, low-level events that cause disruptions without pushing the system beyond a critical threshold. Such frequent, small-scale disturbances can increase system resilience and adaptability in the long term by promoting natural selection and novel configurations during the phase of renewal; described as "creative destruction".

6. **Reflective and shared learning** - individuals and institutions learn from past experiences and experiments to anticipate change and create desirable futures. The more people and institutions can learn from the past and from each other, and share that knowledge, the more capable the system is of adaptation and transformation.

7. **Builds human capital and broad participation** - the system takes advantage of and builds resources that can be mobilised through social relationships and membership in social networks. Participation refers to the active engagement of relevant stakeholders in the management and governance process. Participation can range from simply informing stakeholders to complete devolution of power, but is essential to ensure inclusive, resilient design.

FRAMING RESILIENCE

"What one person thinks is good is not necessarily what another person thinks is good." –anon

The following guiding questions[6] define our approach to assessing resilience:

Resilience of what?

This report considers how well the Jersey food system will continue to provide safe and healthy food to the population without externalising negative impacts on society or the environment. The consideration extends to ensuring that future generations can rely on the island's capacity to be at least partially self-sufficient.

Resilience to what?

The global food system is under pressure from a confluence of environmental factors (e.g. climate change, biodiversity loss, declining soil and water quality, natural disasters) and social factors (e.g. changing demographics, ageing populations, worsening health outcomes, and food culture). This is further exacerbated by economic shocks, geopolitical instability, and resource conflicts.

From whose perspective?

The perspective of policymakers and government, as well as the roles of various actors and connectors in society, including farmers and consumers. Everyone has a stake in the food system and their perspectives are crucial in shaping resilience strategies.

Resilience for how long?

The Rural Economy department acknowledges the need to adopt a more forward-thinking approach to create a sustainable and just future. The report encourages policymakers to extend their time horizons beyond immediate concerns (e.g. cheaper

[6] Zurek et al., 2022 Ann. Rev. Env. & Resources

food imports) and consider the long-term consequences of their decisions. Consequently, the strategic recommendations provide resilience strategies designed to build the island's transformative capacity.

And resilience for what purpose?

The aim is to enhance the island's capacity to produce and distribute food locally; to reduce reliance on imports; improve the health and well-being of islanders; while ensuring the long-term viability of ecosystems and agricultural activities.

Supporting overall island resilience, such as water conservation and landscape management, is also crucial. Lastly, addressing social equity and justice locally by ensuring viable livelihoods and greater access to nutritious food, independent of the global food system, is a significant goal.

OVERVIEW OF JERSEY'S FOOD SYSTEM

GEOGRAPHICAL CONTEXT AND CLIMATE OF JERSEY

Jersey, the largest of the Channel Islands, lies about 14 miles from the northwest coast of France and 85 miles south of England, with a population of about 105,000 (2023). Its temperate maritime climate, influenced by ocean proximity and 45 miles of coastline, brings mild winters and relatively warm summers compared to mainland Europe, with the Gulf Stream contributing to consistent mild temperatures (5-20°C, 40-68°F) year-round. Jersey receives moderate rainfall spread evenly across the seasons, occasionally experiencing storms and heavy rainfall, particularly in winter.

The mild climate and fertile soils support diverse agricultural activities, including dairy farming, fruit and vegetable cultivation, and flower growing, with Jersey Royal potatoes and the Jersey cow being globally renowned. Approximately 50% of the island land area (5,936 hectares) is under agricultural production with the remainder occupied by a central conurbation (St Helier) and smaller centres around the periphery. The Jersey National Park, encompassing 1,900 hectares or 16% of the island's land mass, received official States designation in 2011 and is now a major planning factor in the Island Plan. Of the 947 square miles of territorial sea surrounding Jersey, approximately 6.5% is allocated as Marine Protected Areas (MPAs), predominantly consisting of No Mobile Gear Zones, along with one designated No-Take Zone established at Portelet Bay in 2022.

Understanding future climate projections for Jersey is crucial, as they could significantly impact the island. The fate of the Atlantic Meridional Overturning Circulation (AMOC), or Gulf Stream, will heavily influence Jersey's climate. If the AMOC weakens or collapses due to accelerated meltwater from Greenland and the Arctic, Jersey could experience a climate akin to Newfoundland, with cooler summers and sub-Arctic winters. On the other hand, if the AMOC remains intact, Jersey may see a slow warming trend, transitioning to a hotter, drier, and stormier climate model and experiencing wetter winters similar to hurricane seasons in Florida.

Adaptation strategies and mitigation efforts will be crucial to address the challenges posed by these changing climatic conditions and ensure the resilience and sustainability of Jersey's communities, economy, and ecosystems.

HISTORICAL AND CULTURAL CONTEXT OF AGRICULTURE AND FOOD PRODUCTION IN JERSEY

Jersey is classified as a Crown Dependency, and operates as a self-governing jurisdiction with its unique history, traditions, and legal framework. When compared to the UK, Jersey has historically enjoyed a favourable climate, good maritime infrastructure and significant commercial privileges which allowed for the very early development of export focussed activity. Prior to the 1850s, Jersey agriculture sustained a variety of arable and orchard crops that grew with the popularity of cider in Britain. During the mid to late 19th century, potato culture expanded to take advantage of the island's excellent growing conditions and UK demand. This production pattern has persisted to the present day, although the number of commercial farm holdings declined dramatically after the Second World War.

The people of Jersey had experienced hunger in living memory, which informed the decision to introduce a land-use law that protected agricultural land. This law has served Jersey well in terms of long-term food resilience, as the majority of land is still under agricultural management[7]. Unfortunately, there was an indirect impact that led to many closures of small farms as the export-led model was not economic at a smaller scale. Subsistence, secondary income, and diversified business models weren't considered valuable agricultural ventures at the time. Several other interesting facets of today's system have historical roots, including the relatively high percentage of tenant farmers, land swapping agreements, and (the now rare) use of seaweed (*vraic*) as a soil fertility boosting resource.

Total production across potatoes, other vegetables, meat, eggs, milk, and wet fish in Jersey was estimated in 2015 Food Security report[8], which determined the island's estimated self-sufficiency levels. Unsurprisingly, the unbalanced production pattern reflects itself in the island supply, which is in surplus for potatoes and milk, and deficit in everything else. There are also several important categories of foods that are not produced at all on island, including cooking oils (except butter), halal meats, nuts, seeds, and specialist dietary foods (i.e. baby formula, gluten free), which results in the uneven distribution of food security across communities.

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[7] https://www.gov.je/Industry/FarmingFishing/PlantsProduce/Pages/LandControl.aspx

[8] https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20A%20Brief%20Review%20of%20Jersey%27s%20Food%20Security%2021022018.pdf

CURRENT AGRICULTURAL PRODUCTION AND OVERVIEW OF CROPS GROWN

Detailed agricultural statistics are produced by the Rural Economy Department[9]. This summary considers local production trends from food systems and resilience viewpoints and is not meant to be an exhaustive review.

The average field size is estimated to be 6.5 vergees (3 acres or 1.2 hectares), bordered by banks and hedgerows and accessible through a network of narrow lanes. The inherently high production costs on the island have led to a focus on two high-value agricultural products unique to Jersey. Of the available productive land, an estimated 50% is cropped to Jersey Royal potatoes, and 25% dairy grazing. These statistics are approximate since it is common for arable farms to operate land swaps with dairy herds to facilitate a sub-annual rotation of potatoes and ryegrass/grazing mixes on the same parcel. The pattern of land ownership on the island is distinct, with **nearly 80% of land not farmed by its owners but managed by tenant occupiers**, while approximately ⅔ of the agricultural area is managed by larger-scale farmers[10], whether tenant, owner-occupied, or mixed.

[9] https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%202018%20Agricultural%20statistics%2020200921%20DM.pdf

[10] A larger scale farm is defined as a managed area greater than 250 vergees, or ~45Ha.

With one exception, all larger farms operate conventionally with **critical dependencies on imported synthetic fertilisers and agrochemicals. Smaller producers are also subject to critical supply chain dependencies**, particularly for seeds/crop varieties and scale-appropriate equipment. Industry costs have seen significant surges in recent years, while supply chain disruptions and key political events like Brexit and the war in Ukraine have resulted in increased costs for imports such as animal feed, fuel, and fertiliser, thereby impacting the viability of farming operations.

In March 2024, The Jersey Royal Company was acquired by UK-owned potato supplier, Albert Bartlett, nearly doubling Bartlett's land base and placing most Jersey Royal supply under one company. About **95% of arable production by value is for the export market**, representing Jersey Royal potatoes and smaller volumes of hard vegetables and vinery produce.

Organic land represents only 2.7% of agricultural area, among the lowest rates in Europe[11]. Small scale producers and unknown land use types represent the remaining 30% of land area managed. There are several farms growing cereal crops in addition to their primary activity, with plans for legume trials underway. Oil seed crops are not routinely grown at present. Many smaller scale primary producers supply the local market with a diverse range of products including wine, cider, tea, eggs, lamb, pork, beef, goat milk, mushrooms, watercress, salads, winter vegetables, herbs, and hemp.

Demographics

There is an evident age gap in the current population of agriculturalists and horticulturalists, with the average age in the industry being 55. Moreover, the rising costs and worries about profitability present a long-term challenge in enticing young people to pursue careers in farming. Unlike most current farmers who come from legacy farming families and have either inherited or purchased farms at reduced costs, new industry entrants face enormous barriers, including the significant initial capital required for setup, land, machinery, and accommodation. In addition to global market pressures, the rural industry is facing the challenge of a growing skills gap.

Despite its significant contributions to the local culture, heritage, economy, and sense of place for both islanders and tourists, the agricultural and horticultural sectors are at a critical moment regarding workforce succession planning, skills and knowledge needs, and growth opportunities. It is estimated that **9.2%[12] of farmers will retire over the next five years (7 out of 76 currently on the RSS)**, provided they maintain socio-economic viability.

The 2023 Cultivate Report by the RJA&HS highlighted **there is a demand for jobs in the sector among people of all ages**, amidst skills shortages and recruitment difficulties affecting the local agriculture workforce. For young people interested in pursuing careers related to land management or livestock, no alternative pathways have been made available on the island since the closure of the Philip Mourant Centre in 1999.

Agriculture and horticulture education has not been integrated into primary or secondary curriculum, with few exceptions. There are a number of independently run programmes linking education to farming that are happening across the island, to include: Sprouts Farm Club, open farm days with SCOOP the Sustainable Cooperative, Bramble Farm in affiliation with Highlands College animal student courses, Jersey Heritage at Hamptonne and Le Tacheron Farm, and Jersey Dairy's 'From Grass to Glass'.

More effort to secure agricultural university leavers could be made to bring in motivated and passionate graduates who are already committed to a land-based career. The presence of younger people on farms could in turn motivate local youth to

[12] J. Vautier, personal communication, June 6, 2024.

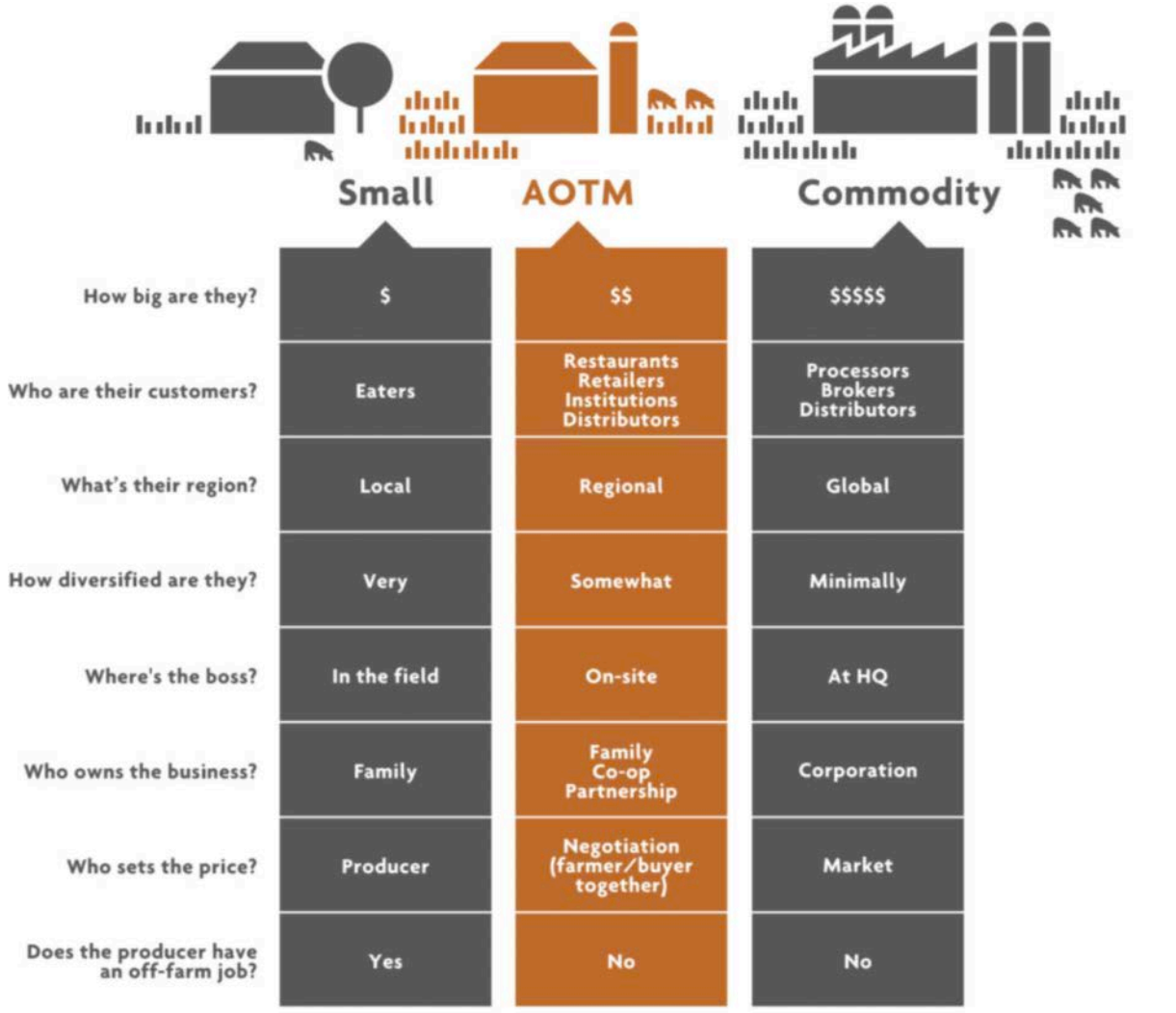
consider a farming career, as presently there are **few role models and very limited access routes** into the industry[13].

A diverse range of expertise spanning multiple sectors, including veterinarians, agronomists, abattoir and knackers yard workers, dairy technicians, mechanics, drivers, chefs, and others, are indispensable for the efficient operation of individual farm and food enterprises. Recruitment and training initiatives, both locally and beyond the island, are instrumental in supporting this vital human infrastructure.

Certain jobs, such as farmworkers and pickers, are at risk of being replaced with automation and artificial intelligence, while other businesses, such as logistics providers and wholesalers, could be enabled to do more work with the same number of people and increase the productivity of their existing resources on the Island. However, vulnerabilities will inevitably arise from increasing cyberattacks if logistics involves a greater reliance on satellites, computerisation, artificial intelligence and automation.

Scale

[13] Jess McGovern. (2022). R*ural Matters (i) Cultivate Agriculture (ii) Cultivate Horticulture*: A report for the RJA&HS and Howard Davis Farm Trust with reference to the Economic Framework for the Rural Economy 2022 [Report].



Scale is an important constraint that limits crop diversification in Jersey. In many cases, the specialist equipment needed for a new type of crop is not affordable due to the limited area of cultivation available to any one grower. **Collective ownership of equipment or collective buying arrangements have potential** to enable diversification, but currently happens only on a limited scale (e.g. organic compost, seed).

Scale further constrains crop diversification because the small volumes grown prevent farmers from accessing economies of scale and therefore the ability to offer lower prices, which results in a competitive disadvantage versus imported goods. However, Jersey does have **potential to orient its strategies towards greater participation in bioregional networks**, which operate on a relational, values-based approach.

In the diagram below, Ag Of The Middle (AOTM) represents medium-sized businesses with a hybrid sales approach to access both local and regional markets. Jersey AOTM

farms could be better supported locally and in regional markets. Small and medium size farms contribute to the variety of food options, and are critical to maintaining stability within the supply chain.

Glasshouses

Approximately 90 vergees are under glass, all of which are at least 15 years old, and about 50% are not cropped. The States are currently consulting on the potential for development on derelict glasshouses, although this a sensitive political issue. Redevelopment of derelict and redundant glasshouses for non-agricultural use is generally not supported, but exceptions exist under certain circumstances, such as delivering significant environmental benefits.

Livestock & Dairy

There are about 4,000 Jersey cattle, with 2,200 of them producing milk and calving year-round, whereby 20%[14] of farmed countryside is used for dairy farming. Currently, all 12 herds supply the cooperatively owned Jersey Dairy, which is the first LEAF certified dairy in the world. The dairy produces nearly 14 million litres of milk per annum, of which 9 million litres of fresh milk or 70% of output is sold to the domestic market. It also produces a variety of other dairy products, including butter, cream, yoghurt, cheese, and ice cream. In recent years, Jersey Dairy has exported to over 30 overseas markets.

[14] https://jerseydairy.com/news/annual-review/

With trends towards greater specialisation and investment in technology to support their operations, such as individualised nutritional supplements and enhanced health monitoring, **dairy operations have become capital intensive**. This makes it very unattractive for new entrants using the traditional model.

One dairy farm uses a hybrid model, processing small amounts of its milk into premium artisanal products like yoghurt, kefir, cheese, and gelato, while sending most of the yield to Jersey Dairy. Small herds of JerseyxAngus and JerseyxWagyu crosses are also kept for the domestic meat market, to supplement ex-dairy beef which is slowly gaining in popularity. However, the **abattoir equipment is not designed to handle larger breeds**, which prevents the growth of this market.

Eggs

Egg production on Jersey experienced a substantial surge between 2010 and 2015, with the number of laying hens increasing by about 50% from 18,000 to 27,000[15]. By 2023, the number of laying hens had decreased slightly to around 21,000. Assuming each hen produces an average of 300[16] eggs per year, the total annual egg production on Jersey would be approximately 6,300,000 eggs. The scale of egg producers varies significantly, ranging from large-scale farms that produce approximately 6,000 eggs per day, to small-scale operations with fewer than 100 hens. This diversity reflects the island's diverse agricultural landscape, with both commercial and hobbyist egg producers contributing to the overall egg production.

Fisheries

The fisheries sector primarily focuses on crab and lobster, alongside niche fishing for bass, cuttlefish, and pollock. In 2019, the island produced 1,350 tonnes of farmed shellfish (mainly Pacific oysters), 97 tonnes of wet fish (predominantly skate/ray, dogfish, sea bream, and bass), and 1,715 tonnes of shellfish (mainly brown crab, lobster, scallop, and whelk)[17]. Of this, **approximately 98% was exported to markets in the UK and EU**. This highlights a massive vulnerability in that **any failure or loss of an**

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[15] https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20A%20Brief%20Review%20of%20Jersey's%20Food%20Security%2021022018.pdf

[16] https://www.bhwt.org.uk/blog/health-welfare/how-many-eggs-a-day-does-a-hen-lay/#:~:text=A%20hen%20in%20her%20prime,to%20lay%20after%2078%20weeks.

[17] https://www.gov.je/StatisticsPerformance/BusinessEconomy/Pages/AgricultureFisheries.aspx

export market could lead to a collapse. Unlike larger companies in the UK or France with multiple boats, Jersey's fishing industry comprises independently run businesses. The total number of boats in the fishing fleet has decreased by two-thirds in 15 years, dropping from 328 in 1996 to only 114 in 2021. Approximately 30 full-time fishermen operate in Jersey, with scallop divers and dredgers constituting a portion, and an additional 8,000 anglers recreationally fishing in Jersey's waters.

In recent years, concerns have arisen regarding stock replenishment, notably with whelk and brown crab, due to the impacts of climate change. New regulations, including minimum landing size increases and stock management measures, aim to address overfishing and support the sustainable management of fish stocks. **Despite initiatives like MSC accreditation, there has reportedly been no added value for Jersey fishermen, prompting a review of its effectiveness.** However, Jersey's success in niche, high-value products like oysters, stems from its exceptional growing conditions and unique tidal ranges. Notably, one beach, encompassing a 50-hectare site on the south coast, accounts for half of the UK oyster market. Obtaining higher market values for fishery-based products remains a challenge, with instances of price undercutting from both other countries and local competitors.

Lack of processing facilities exacerbates challenges, pressuring fishermen to sell excess catch at lower prices. Cooperation and investment are essential for processing facilities, but the **individualistic mindset among fishermen** poses challenges for collective action. Complexities arise in management initiatives that require collective buy-in, such as the expansion of marine protected areas, leading to **uncertainty about future prospects and investments.**

Despite challenges, the fishing community demonstrates resilience, adapting quickly to changing circumstances. Efforts continue to assess stock levels and fishing pressure to inform sustainable practices and shape the future vision for the industry.

Similar to agriculture, the fishing and marine sectors appear increasingly vulnerable– due to the declining number of fishermen, high barriers to entry, unprofitability, and market uncertainties. The demographic shift in the industry reflects fewer newcomers, largely resulting from the high cost of obtaining a UK licence and perceived difficulty of earning a decent livelihood.

While the fishing and marine sectors contribute minimally to Jersey's GDP, accounting for only 0.1% of the island's economic output, they are important to Jersey's identity and local food production, contributing to the island's food resilience.

Following the publication of the 2022 Economic Framework for the Marine Environment, which is intended to act as a guide for managing the island's marine and fisheries industry, the Rural Economy delivered the Marine Sector Support Scheme in 2023. Under the Marine Sector Support Scheme, financial support will be made available to help cover increasing running costs such as fuel and staffing, increased safety requirements, as well as longer-term business investment. However, the number of credits allocated to each eligible business will be linked to their environmental and social impacts. The Marine Sector Support Scheme will be further developed in 2025 to effectively align it with the objectives of the Rural Economic Framework.

Aquaculture

Jersey has an active freshwater fishing association which maintains a trout hatchery to rear fish for sport. Production is variable but could represent a seasonally significant source of food for licensed members.

FOOD DISTRIBUTION, STORAGE, PROCESSING AND MANUFACTURING

Key components of Jersey's food infrastructure include: the Jersey Dairy, the abattoir and knackers yard, sorting and packing operations for Jersey Royals, purification units for shellfish processing by Jersey's aquaculture businesses, and landing/loading facilities at Jersey's harbours for imports.

Transport & Logistics

Condor Ferries is the main RoRo ferry (roll-on, roll-off) operator in Jersey under an agreement with the Government, while multiple operators handle LoLo (load on/off) services, including Ferryspeed, which also dominates freight logistics, managing 75-90% of the island's freight. RoRo is used for time-sensitive and temperature-controlled goods, whereas LoLo is for less urgent and bulk products. There are now very few warehouses in Jersey, as retailers have adopted 'Just in Time' ordering and

keep minimal stock. This has reduced resilience, causing any disruptions or delays to be felt within 3 days of no boats. Ferryspeed offers a twice-daily freight service using Condor between Portsmouth and Jersey for food imports and chilled containers. Additionally, Ferryspeed operates a 60,000 sq ft warehouse in St Helier. Independent warehousing operations on a smaller scale also offer storage facilities for ambient, fresh, and frozen products catering to the retail and catering industries.

Jersey imports approximately 90% of its food supply. The island relies heavily on imports, particularly from the UK, to meet its food needs, leaving it **susceptible to fluctuations in the UK's food inflation rates.** As a result, the Condor ferry service, Ferryspeed logistics provider, along with associated harbour facilities and warehousing in the capital, stand out as the most critical elements of the island's food supply chain resilience. The monopoly positions of Condor and Ferryspeed impact negotiations and resilience in the Jersey freight logistics market.

Smaller-scale freight services connect St. Helier with France. Rozel Shipping operates a route between St. Helier and Granville, Normandy, and Normandy Trader have two ex-military landing crafts, which ship twice weekly shellfish to France and then return with food, building materials, machinery, etc. While Jersey has good freight routes with France, **most retailers rely on UK supply chains due to established relationships and technical lock-ins with larger UK-owned supermarkets.**

The Co-op CI has started stocking products from French supermarket Carrefour, but the time it takes to order from the UK is significantly shorter, at 3 days, compared to 6 weeks for ambient products and 2 weeks for chilled products from France. Freight charges are the same from the UK and France, despite the longer distance travelled from the UK. This means that within the current structures, there is no economic incentive for retailers to source more goods from France, as the cost of transportation remains the same regardless of the origin.

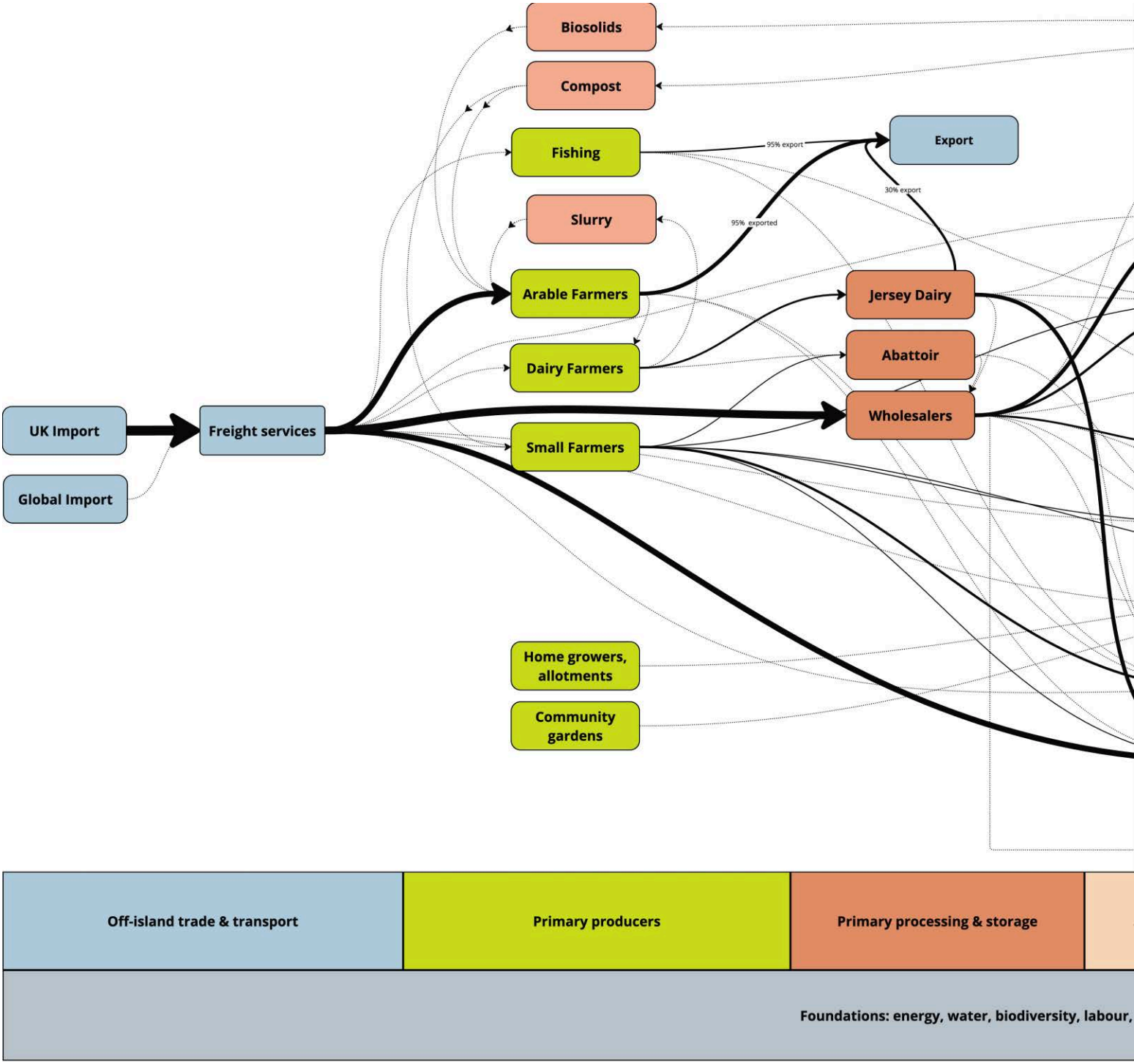
Vegetable, Oilseed, Legume, and Cereal Processing

Basic vegetable processing facilities are somewhat present, including sorting, cleaning, and packing operations on various farms. However, infrastructure for processing cereals or oils is lacking on the island. Notably, at least one farm business is currently in the process of constructing a mill, which could potentially alleviate some of the deficiencies.

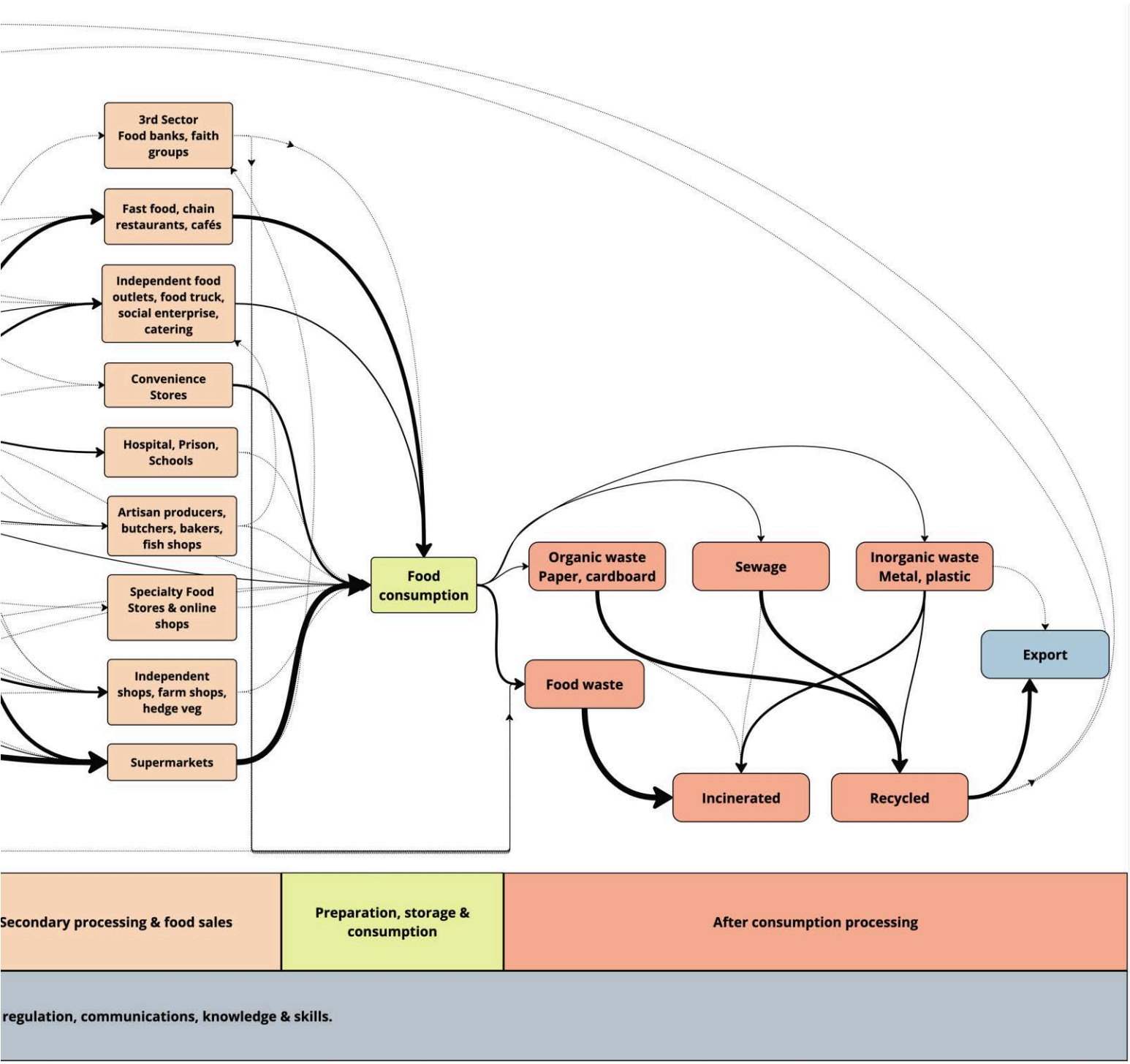
Alcohol

Jersey boasts a modest volume of alcohol production, primarily derived from on-island apples collected from around 60 orchards. La Mare Estate produces 20,000 bottles of wine annually from its nine acres of vineyards. Several emerging local businesses engage in distilling spirits such as gin and vodka, and one microbrewery.

FOOD DISTRIBUTION AND SUPPLY CHAIN / FLOWS



A schematic visualisation of the material flows in the Jersey food system, coloured by sector and underpinned by essential resources that enable the whole system. Thicker arrows denote larger volumes of material. The most highly connected nodes are (1) freight services, (2) small farmers, and (3) wholesalers.


3rd Sector
Food banks, faith groups
Fast food, chain restaurants, cafés
Independent food outlets, food truck, social enterprise, catering
Convenience Stores
Hospital, Prison, Schools
Artisan producers, butchers, bakers, fish shops
Specialty Food Stores & online shops
Independent shops, farm shops, hedge veg
Supermarkets
Food consumption
Organic waste
Paper, cardboard
Sewage
Inorganic waste
Metal, plastic
Export
Food waste
Incinerated
Recycled
Secondary processing & food sales
Preparation, storage & consumption
After consumption processing
regulation, communications, knowledge & skills.

Overview of Food Distribution Networks

Jersey's food supply and production materials are largely determined by commercially available trade links. While efforts have been made to diversify supply sources, this could be pursued further. However, if new links, such as those with France, are simply used to import produce from larger French supermarkets, it is unclear how this would increase island food resilience.

On the other hand, **new links to connect to a diverse range of food businesses in a bioregional approach could improve the quality and affordability of nutritious food and fresh produce**. Shorter links to the nearby continent could potentially provide more stability in the event of shipping disruptions in the English Channel or at the English ports.

The extent of import dependency may not be readily obvious to consumers: although it appears that Jersey offers a variety of food outlets, these **businesses all share a small number of common suppliers**. At the wholesale and supermarket level, buying decisions are made by a small number of individuals, some of whom are no longer based in Jersey. Some chains have retained local buyers who have relative autonomy even though the retail market is dominated by larger supermarket chains with UK-based operations.

Distribution on-island at the household level is challenged by the relatively large network of small access roads, which totals 346 miles (557 km), a historical anomaly resulting from Jersey's former inheritance laws.

Import and Export Trends

The island operates as an open system with large volumes of imported and exported materials. Currently, **food and drink import is estimated at 153,000 tonnes a year[18].** Apart from food imports, significant volumes of agricultural and marine resources are also imported, principally synthetic and organic fertilisers, agrochemicals, seed, fuel, plastics, and equipment.

Export volumes have been relatively stable over recent years, but historically, they were much higher during periods when Jersey was a more significant producer of

[18] Webster report + adjustment "in 2018: 24 13m refrigerated grocery containers a day"

fresh vegetables and bulbs/flowers. Food exports amount to approximately 31,000 tonnes a year[19,20]. Additionally, around **11,500 tonnes of waste, including paper/ cardboard and plastic bottles, are exported for recycling** in the UK[21].

Supermarkets

Supermarkets have a significant influence on the affordability, availability, and consumer choice of food in Jersey. Approximately 97% of islanders surveyed by the Jersey Retail Report used supermarkets, while 43% visited farm shops and independent retailers. Shoppers are mostly using personal vehicles to shop, with only 15% of respondents walking to the shops, and 8% using public transport[22].

Supermarkets remain a critical food access point for many islanders, the convenience of a one-stop-shop, the range and variety of products offered, as well as consistency, are all quoted as reasons supermarkets are preferred outlets. Why aren't more local foods available in supermarkets?

Supermarkets have very high standards of regulation that suppliers must reach.

To ensure food safety, supermarkets are subject to external and internal quality and safety controls. Controls on processes and standards also apply to suppliers. For example, local lobsters cannot be stocked by one supermarket due to particular requirements for how live lobsters are killed. There is little to no scope for negotiation, but many supermarkets will support suppliers under some circumstances, with a few notable success stories. Funding from the Rural Support Scheme is available to improve food business operations to meet recognised standards, but developing compliance at the production stage may not be enough.

The local product has to fit into the supermarket strategy.

Depending on the brand, supermarkets may pursue a high quality strategy, or a low price strategy. In either case, the supplier either has to meet the high quality standards, or offer the product at a low enough price to be competitive with larger

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19 https://www.gov.je/statisticsperformance/businesseconomy/pages/agriculturefisheries.aspx

20 https://www.gov.je/government/freedomofinformation/pages/foi.aspx?ReportID=7039

21 https://www.gov.je/StatisticsPerformance/Environment/Pages/WasteManagement.aspx

22 https://www.gov.je/SiteCollectionDocuments/Industry%20and%20finance/Jersey%20Retail%202023%20Report%204Insight.pdf

food producing regions in the supermarket supply chain, while still meeting compliance standards.

Supermarkets must make enough margin across the category.

This is a challenge especially when the category manager is not locally based and may not be motivated to make adjustments to accommodate a lower margin local product. Jersey may be at a further disadvantage because the additional costs of business use up available margin allowances.

Supermarkets need some stability in supply.

The length of season required varies between supermarkets and between products, but most will be able to make product swaps to bring in local supply when it is available at the required standard and volume.

Jersey's supermarkets are large businesses, funded and owned by shareholders, expecting profitable returns through dividends and capital gains. The UK-supermarket model drives consolidation (which may include asset stripping) and specialisation of local suppliers, as well as increased globalisation of supply at the national level, all to the detriment of smallholder farmers, local suppliers, and the island community. This trend is exemplified in Jersey by the history of the SandpiperCI Group, the largest food retailer in Jersey..

Local Markets and Producers

There are a variety of locally owned and operated farm shops and 'hedge-veg' stalls across the island that sell local products. However, according to Genuine Jersey, 50% of the long running farm shops since 2019 have closed their doors permanently, a worrying development.

SCOOP the Sustainable Cooperative, a consumer-led cooperative, links small-scale food and drink producers, who prioritise environmental stewardship, with local customers. By offering a stable market and fair prices for their products, SCOOP supports 104 local producers and works together to enhance the conditions and infrastructure needed for organic farming to flourish in Jersey. The cooperative prioritises local growers and farmers certified by the Soil Association and supplements their offerings with sustainably farmed produce from participants in their Pathways To Organic Markets program. Through its vibrant farm shop, innovative production

kitchen, and inclusive cultural and educational programmes, SCOOP promotes food practices that protect natural resources, nurture biodiversity, and minimise waste.

COST TRENDS

Cost of Living

Business costs are increasing for the food and farming industries, further exacerbated by a 12.7% surge in the cost of living in Jersey, marking the highest inflation increase in four decades. Housing costs increased by 16.7% between 2023 and 2024 (down from 26.2% in September 2023), while food costs increased by 5.9% (down from 10%). Pressure from the cost of living results in growing inequality and restricted consumer choices.

Household Spending on Food

The average household spends 9% of their total weekly expenditure on groceries (approximately £112), going up to 15% for low-income households[23,24]. Grocery prices in Jersey are higher than in the UK. A shopping basket at the same retailer costs approximately 12% more[25] in Jersey than in the UK, which is attributed to higher costs in freight, labour and the UK VAT exemption on food. Operating a grocery retailer in Jersey costs approximately 10% more than elsewhere in the UK due to higher distribution (5-8%), labour (2-5%), and rental costs (around 1%). These increased expenses are passed on to consumers. Shoppers and the Consumer Council have also pointed out the steep rise in food costs over the last 3 years[26].

A 2022 proposal from Deputy Raluca Kovacs to remove GST from food was rejected by the States Assembly.

There has been a shift in how people shop since COVID-19, although supermarkets and restaurants continue to dominate food access. Consumer habits have noticeably changed from weekly shopping to more frequent top-up shopping, and an increase in purchases from convenience stores and smaller footprint supermarkets. **The trend towards convenience shopping could lead to a reorganisation in big supermarket dominance.** Within the overall food spend, the proportion of lightly processed to ultra-highly processed foods differs between consumer groups, but there is as yet little systematic research into these trends in Jersey.

Housing and Land

The cost of housing plays a big role in pushing households towards poverty in Jersey. The value of a traditional Jersey farmhouse was £92,000 in 1972, £415,000 in 1994, and £7.5 million in 2024[27]. A combination of restricted supply, demand for high value housing and the use of homes as investment vehicles has substantially raised house prices and rents. The rise in house prices has effectively nullified the beneficial effects of tax and benefit policies aimed at reducing income inequality. Income inequality in Jersey is greater than in all but two European countries, even before housing costs are taken into account. The issue of rising food costs and pressures on the food system

[23] https://www.itv.com/news/channel/2023-06-06/soaring-food-costs-not-blamed-on-lack-of-competition

[24] https://www.bailiwickexpress.com/jsy/news/shopping-baskets-cost-12-more-jersey-same-uk-retailer/

[25] https://www.jcra.je/media/598834/groceries-market-study-frontier-economics-final-report.pdf

[26] https://www.consumercouncil.je/news/basic-food-prices-up-so-keep-shopping-around

[27] J. Vautier, interview, May 13, 2024.

cannot be considered in isolation but needs to be examined alongside other aspects of social mobility[28], particularly the housing market in general and the upward pressure on wages from the finance sector.

The majority of the island's agricultural land is not owned by agriculturists. Therefore, some of the land resource for local food production may be owned by people who don't have an interest in the productive countryside. Agricultural land occupiers must qualify as "bona fide agriculturalists" which has meant in practice that only dairy or potato farmers are suitable. **There is no formal mechanism to connect landowners with an available tenancy** with smaller farms or individuals with a different offer. If available tenancies were coordinated better, it would also enable tenant farmers to source fields closer to their base of operations, offering efficiencies in production and reducing the need for cross-island trips. Jersey could also consider a Community Right to Buy Act wherein an appropriately incorporated community body has first refusal of available land parcels. Enabling access to land for production is essential to prevent further erosion or destabilisation of food resilience in the context of who owns the resources for food production.

Food Banks

In 2023, food banks in rural parishes were experiencing a surge in demand as Islanders face higher mortgage repayments and a rising cost of living. The rise in demand is attributed to increasing numbers of social-housing estates in rural parishes, making it difficult for families and the elderly to access food banks in town.

The St. Vincent de Paul food bank has seen a 168% increase in people needing help between 2022 and 2024[29], rising from 157 weekly users in February 2022 to 421 in February 2024. Both St Vincent de Paul and Grace Trust Jersey reported an uptick in inquiries from working individuals, who discovered that their income no longer sufficed to cover their monthly expenses. Essential workers, carers and hospitality staff are among the 40% of those seeking assistance who, prior to the surge in living costs, could adequately manage their finances but were now on the brink of financial hardship.

[28] https://www.policy.je/papers/housing-and-social-mobility-in-jersey

[29] https://www.itv.com/news/channel/2024-03-18/an-absolute-travesty-food-banks-face-record-demand-for-services

Community leaders and advocates acknowledge the vital role of charities in supporting financially vulnerable individuals, but criticise the underlying economic inequalities and government policies that contribute to the increasing reliance on food banks.

HEALTH OUTCOMES

Health Outcomes

Jersey's food system has been described by Public Health as "deeply entrenched" and "carrying significant health risks[30]". Using UK modelling estimates for the broader economic impact of overweight and obesity, it's projected that these issues cost Jersey's economy £42 million[31] annually. If current trends persist, this cost is expected to rise to £57 million per year by 2025.

Furthermore, **the prevalence of preventable, diet-related disease is projected to increase in the coming 20 years**. Health is a multifaceted phenomenon, nevertheless, this evidence suggests that **our food system is not contributing to good health outcomes as well as it could.**

In 2023, Jersey's Public Health Department performed a root cause analysis to trace the sources of poor nutrition, with several critical findings that are well supported by this work. For the purposes of this report, we emphasise findings which impact food resilience.

Public Health recognises that high-quality, seasonal, local food can contribute to health outcomes and therefore found that **barriers to local food production are barriers to good health**. The availability of healthy and delicious food is very poor: when compared to the readily available alternatives, **nutritionally dense food is less available**, less attractive (in terms of effort required), more expensive, and more knowledge intensive. Poor access to good food damages the island's resilience as a whole. Access to food and supply are both influenced by knowledge, beliefs and

[30] Food & Nutrition Needs Assessment Draft v3

[31] https://www.gov.je/SiteCollectionDocuments/Health%20and%20wellbeing/R%20A%20Food%20and%20Nutrition%20Strategy%20for%20Jersey%202017%20-%202022%2020180228%20JM.pdf

understanding of food (food culture), which does not currently support good health for the majority of islanders.

Interview evidence from **general practitioners in Jersey reported 50% of their clients had developed a food addiction,** of which roughly 25% had experienced physical or sexual abuse or trauma in their childhood. The prevalence of food addiction among their patients, coupled with the fact that 1 in 2 islanders[32] are clinically overweight or obese, indicates there is **very little food culture aimed at cultivating healthy relationships to food.**

Various healthcare professionals and GPs are striving to educate and motivate individuals towards making lasting, evidence-backed changes in their lives. There's a growing need for supportive guidance in both mental and physical wellness, embracing gradual, sustainable changes to diet and lifestyle. Changes to the food system to improve health outcomes should be carefully considered as badly designed interventions could have no, or negative, impacts. There is a strong case to encourage experimentation and trials to determine where efforts are best placed.

[32] https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/Obesity,%20Diet%20and%20Physical%20Activity%20Profile.pdf

Increased awareness and understanding of nutrition, cooking skills, and food systems are needed to enable informed food choices and healthy eating habits at every age. **Food could be used more creatively to support social activities** with increased numbers of foodie events and pop-up venues to expand the range available.

Specific approaches identified so far include **food culture development** where this is lacking, as food cultures fundamentally shift values around food and enable individual and group development of skill. Improving **access to higher quality foods** for groups who have the culture and knowledge to prepare foods is important, and **good quality staple foods at affordable prices** could contribute to all diets. There is some evidence to suggest that, like access to food, **food knowledge and the skills/equipment to make food are not equitably distributed** in the Jersey community, thus tackling both food access and knowledge is one way to address systematic inequalities in the food system. Additionally, there are several opportunities to **develop tailored food delivery services** for specialist markets where there is a high level of need combined with rising health costs.

SOCIAL OUTCOMES

Rural Recreation

Food is produced on 50% of the island's land area, yet over 80% (combined dairy/ livestock, arable, and marine) of production is exported by a small number of businesses. Profits derived from export generate a small but relevant contribution to public accounts, but a large part of the agricultural land base is not managed for the local market, and consequently the local population does not engage with the productive landscape. **Continued offshoring of agricultural ownership does not support a resilient food supply.**

To address this issue, there are efforts to establish better relationships between town and country. Nevertheless, **interactions with the main activity of the countryside – food production– remain limited** as the percentage of community supported agriculture and local growers is very small. This highlights the need for more support and engagement from the local community to promote a more sustainable and equitable food system[33].

[33]Woodhill, J., et al., (2022). *Food Security.*

Rural and Food Livelihoods

Access to the rural job market is very restricted and there is no development pathway[34], especially for islanders who are outside the farming community. Agriculture is not taught in schools or Highlands College, and, although recent apprentices have been very successful, there remain very few apprenticeships available. Careers in agriculture are significantly disadvantaged when compared to the earning potential of the main finance activities and other professional services, driving school leavers and graduates away. Job adverts for the agricultural sector are almost never seen on Gov.je/jobs (except contract gardening) with **many farm businesses recruiting through personal networks** and word of mouth. Farms also cite poor commitment and low professionalism from local hires, leading to **low confidence in local jobseekers**. Together these factors make agricultural careers virtually inaccessible.

Given the high cost of living, decent rural livelihoods are difficult to attain and may only be possible when costs are reduced, for example by having a multi-generational family home, or through supplementary income from a second job. The **high cost of housing is considered prohibitive** for a single person or couple both committing to agricultural employment. These factors contribute to the high average age of farm business owners and difficulties with succession.

The cost of land and labour present very high barriers for new business entrants. Furthermore, **there is no business development support for new entrants** from institutions like Jersey Business who could offer guidance or, at minimum, signposting to useful resources. Some agricultural businesses did not know about the Rural Support Scheme and therefore could not access any advice or funding from this source.

Food careers, on the other hand, are well supported with targeted training programmes, skills development opportunities, business support and guidance. Food businesses can access support through Jersey Business, but different employers give varying levels of support to new staff regarding menu development and sourcing. **Information about how to access local seasonal produce for commercial outlets is limited**, and could feature in an information pack for new kitchen hires.

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[34] Jess McGovern. (2022). Rural Matters (i) Cultivate Agriculture (ii) Cultivate Horticulture: A report for the RJA&HS and Howard Davis Farm Trust with reference to the Economic Framework for the Rural Economy 2022 [Report].

ENVIRONMENTAL IMPACTS OF THE FOOD SYSTEM

Offshore Impacts of Our Food

"Local" food is often cited as better for the environment, while "global" food is hailed as more efficient and less expensive. Neither of these labels are uniformly true and the local-global opposition in food is an unhelpful way to frame the underlying relationships. Many "local" food production systems rely on global supply and may be ecologically more harmful than other systems located further from the consumer. Similarly, the efficiencies and specialisation of a globalised food supply may ultimately erode the system's long-term capacity to deliver by increasing the influence of points of failure. Major agricultural subsidies for globally traded commodities externalise hidden costs and obscure the true cost of cheap food.

True Cost of Food

Cheap food is regarded as good for consumer choice and affordability, yet the wider societal and environmental costs of cheap food are often externalised and not tackled systematically. The Sustainable Food Trust found **the true cost of food in the UK is significantly higher than the retail price, where for every £1 spent on food, an additional £1 in hidden costs is incurred[35].** The largest proportion of these hidden costs, around 50p for every £1 spent on food, is attributable to the impacts of intensive production methods, including environmental pollution, natural resource depletion, soil degradation, and biodiversity loss. Food-related healthcare costs linked to poor diets account for an extra 37p, while food imports add an additional 7.8p[36]. When environmental outcomes, water pollution, diet-related health issues, local socio-economic impacts, and food miles are not taken into account, products grown in Jersey are uncompetitive compared to equivalent produce available elsewhere in the supply network.

[35] https://sustainablefoodtrust.org/wp-content/uploads/2022/01/Website-Version-The-Hidden-Cost-of-UK-Food_compressed.pdf

[36] https://research.senedd.wales/research-articles/sustainable-food-trust-guest-blog-post-the-hidden-cost-of-uk-food/

The whole island participates in a food system whose impacts are only partially seen in the local landscape. Fully assessing the environmental impact of the food we eat from exporting countries globally is beyond the scope of this report, but it must be recognised that **our eating habits have impacts in other economies.** Understanding the resilience of other economies is essential to understand our own food resilience, but very difficult to practically analyse.

Therefore, **to significantly influence the resilience of the food system, more food needs to be produced in Jersey** where we can shape environmental and social outcomes. However, our existing participation in the global food system could move to a values-based and relational approach, which considers the broader food environment, rather than merely the point of production. For Jersey to be a responsible participant in the global food system, **sourcing strategies and standards could be a factor in future concessions and food retail licensing.**

CRITICAL RESOURCES

Soil

Despite the steep cotils (steeply sloping fields), catastrophic bulk soil loss is not a serious issue in Jersey; the steepness also limits the intensity of machine usage, which may alleviate soil damage. However, **decades of intensive potato cultivation have damaged the soil structure** in many growing areas, and seasonal soil loss is evident in many surface water courses. Some farms are remediating soil by extending crop

rotation and lengthening periods under temporary pasture, but the effectiveness of these measures depends on the specific soil and cropping plans.

Most soils are somewhat to very acidic, which suits the two predominant crops (grass and potatoes). **Diversification to less acid-tolerant crops would increase the demand for lime** and lime substitutes. Although gypsum/plasterboard is currently used, the intensity cannot be increased without negative side effects, so alternative lime sources need testing and development to avoid costly imports.

Due to the spreading of biosolids (processed sewage sludge) and manures, local soils are rich in phosphorus and generally do not need further additions. Historical use of fungicides and biocidal chemicals can result in a build up in soils, which may cause problems in terms of excessive residues in certain crops. **Legacy biocides with mineral-binding actions could also create micronutrient deficiencies** that may not be apparent until crops with different requirements are grown.

Water

The combined effect of the relatively large population and low storage capacity amount to **significant pressure on the island's water supply**. Local reserves provide approximately 120 days supply[37], assuming there is no compromise of critical infrastructure. In drought conditions, a detailed series of measures are planned, which progress from public awareness, to hosepipe bans, then restriction on non-essential water use. Agriculture is classed as non-essential and abstraction from streams and groundwater would be prohibited. Even without the water use ban, **local production would be strongly impacted by drought** conditions.

Contaminants in surface waters are very common outcomes of the intensive land use, leaky septic tanks, soakaways, agricultural runoff, and chemical pollution incidents. Despite continued successful efforts of the Action for Cleaner Water Group, all catchments where there is agriculture or industrial activity still exceed acceptable nitrate loading levels throughout the year[38]. Waters are blended to achieve acceptable nitrate levels in the treated water supply. However, effluent water from the waste water treatment plant is not treated for nitrate removal, generating a point source of marine nitrate pollution.

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[37] M. Bowden, interview, May 3, 2024.

[38] https://jerseywater.maps.arcgis.com/apps/webappviewer/index.html?id=aee3af0e447b4220b6b55ca909e619ad

There are more serious pollution incidents which negatively impact the quality of groundwater and have resulted in some groundwater sources barred from use. The subsurface geological structure has so far prevented widespread movement of contaminants, but **with such a small water base, Jersey remains vulnerable to pollution incidents**.

Biodiversity

Biodiversity is an essential resource for local producers, yet surprisingly, up-to-date analysis is only available for a number of iconic species, such as the Ormer (*Haliotis tuberculata*) and the Atlantic Puffin (*Fraturcula arctica*). A few species groups are protected by law, or have a well-developed amateur community and successful organised programmes in place to provide systematic monitoring and protection of vulnerable species[39].

The 2010 biodiversity strategy for Jersey[40] identified that **the relevance of biodiversity is misunderstood**, which could explain why more comprehensive monitoring is not in place. Additionally, the two main crops (potatoes and dairy) are not pollination-dependent, so perhaps there is less emphasis on ensuring that this vital service is performed by nature every year. With the rise in interest in Biodiversity Net Gain and similar credit programmes, Jersey should **develop better baseline biodiversity statistics** if these schemes are to have any meaningful positive impact locally. **Dependence on a limited selection of crop varieties and animal breeds** narrows genetic diversity and significantly increases vulnerability to shocks generated by climate change, drought, pests, and disease.

Actions to reverse these threats to biodiversity in agriculture are now credited on the Rural Support Scheme at a level that compensates for the maintenance of biodiversity features (e.g. hedgerows or wildlife ponds). The level of support for landscape elements could increase to **encourage more farms or landowners to reinstate biodiversity features** which have measurable value, such as through the Hedgerow Carbon Code[41]. These measures could increase the wildlife value of areas of land with negligible farming value that are otherwise vulnerable to abandonment.

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[39] Birds on the Edge. (2023). http://www.birdsontheedge.org/

[40] https://www.gov.je/SiteCollectionDocuments/Planning%20and%20building/Island%20Plan%20BiodiversityStrategy%202010.pdf

[41] https://www.allertontrust.org.uk/projects/hedgerow-carbon-code/

Waste

All food waste and "black bag" household and commercial collections are incinerated at the island's energy from waste (EFW) facility. The UK food charity Wrap found that on average 95kg of food waste is produced per person per year[42], amounting to a potential **8,700 tonnes of food waste in Jersey**. Household food waste at this level would make up about 25 to 35%[43] of total parish deliveries to the incinerator. **Food wastage and disposal is an enormous loss of nutrients which are imported at cost.** Most supermarkets have developed mechanisms to reduce their food waste, either using the non-saleable items in internal canteens and discounted food sales, or sending items out to Olio (a food waste reduction app) or charities.

Sewage biosolids, green waste, and packaging wood are the only organic materials currently recycled, in contrast to Guernsey where an innovative approach to food waste has been developed and household composting is encouraged[44]. **Continuing to develop organic material management** at every stage from purchase through to use and disposal is essential to close the nutrient cycling loop and increase resource use efficiency.

From a systems point of view, **there is a negative feedback loop operating within the island's waste management programme.** There are charges applied to circular materials systems (e.g. commercial green waste charges, commercial solid waste charges) while the linear waste disposal mechanism (incineration) is free (commercial and household). Action on **tackling waste in the food system could be stimulated by rethinking waste charges** to encourage a more circular mindset.

[42] https://wrap.org.uk/resources/report/household-food-and-drink-waste-united-kingdom-2021-22

[43] https://kitche.co/jersey/

[44] https://www.gov.gg/composting-case-studies

POLICY, LEGISLATION, REGULATION & GOVERNANCE FRAMEWORKS

Regulation & Policy Intersections with Food and Farming Resilience

The sources of food regulation and guidance in Jersey are outlined in the table below to evidence the complex legal and regulatory frameworks surrounding the food system. In a systematic search on the Jersey Legal Information Board, excluding non-sector specific laws governing employment, businesses, insurance, competition, etc.[45], we found:

- 6 primary agricultural laws,
- 8 fishing laws,
- 4 primary food laws,
- with a combined total of 40 secondary orders, acts, and regulations.

In addition to the legal setting, there is further detail set out in governmental policies that regulate day-to-day activities. Jersey Business has a comprehensive guide to setting up food businesses, which covers all the required policy, but the comparable

[45] https://www.jerseylaw.je/laws/current

sources of information for farming or fishing could be presented in a clearer and more comprehensive way.

Sources of food and rural policy include:

Organisation	Activities & impact on food system
Council of Ministers / States Assembly	Strategic objectives and priorities, including focus on wellbeing & costs of living (including food); debate and decide on policy, legislation, public spending and taxation.
Treasury and Exchequer	Government investment and long-term planning. Administration of personal income tax, corporate income tax, Goods and Services Tax (GST), and Land Transaction Tax. Tax policy development.
External Relations	Maintenance of domestic autonomy over rural and marine affairs; development of trade relationships; promoting island identity and reputation (brand perception).
Children, Young People, Education and Skills	Curriculum for ages 3 to 19 including food and nature education; via Skills Jersey: careers guidance and pathways into food and land based industries; industrial apprenticeship programmes.
Customer and Local Services	Employment and contributions services for food and rural businesses; moving to Jersey, residency and registration of employees and entrepreneurs; employers guidance and regulations for food businesses.
Economy	Advice, policy and legislation directly influencing rural affairs and food business. Funding food production through the Rural Support Scheme and Grant.
Health and Community Services	Provision of health services including dietary advice, diagnosis, and management of food-related illnesses.
Strategic Policy, Planning & Performance	Common strategic policy and Government Performance Framework; Future Jersey 2018 to 2038; strategic foresight and planning to identify future risks and opportunities; monitoring of Government objectives and targets including agri-environment and food related outcomes.
Planning	Development of housing zones (affects food access); permitted development controls (affects permitted farm activities); building control (affects farm shops and facilities).

Public Health	Strategies to improve health and wellbeing, and to tackle health inequalities. Policies to make it easier for Islanders of all ages to access and afford healthy, nutritious food.
Environmental Health	Licensing, regulation, inspection and enforcement of food hygiene and safety in food businesses.
Infrastructure & Operations	Critical island infrastructure including transport networks and waste water management. Processing waste (incl. food & packaging). Recycling metal food packaging and plastic bottles. Horticultural green waste composting. Energy from Waste plant (incinerator).
Natural Environment	Rural environment protection and enhancement including Land Control; research and advice on invasive species; veterinary services including animal welfare; countryside access network.
Justice and Home Affairs	Emergency planning including food & water ration plans; border protection and control of trade goods including food and agricultural products. Food relevant law enforcement. Health & Safety Inspectorate for occupational/work-related operations.
Charity Commissioner	Guidance on the Jersey Charities Law for third sector food operations.
Competition Commission	Enforces Competition (Jersey) Law 2005: preventing anti-competitive behaviour, regulating agreements between businesses, and overseeing mergers to promote fair markets and benefit consumers.
Bailiff's Chambers	Licensing of new food businesses and events.
Jersey Business	Productivity support scheme; career pathways; business set up and guidance; professionalisation of business managers/leaders.
	Non-local regulations
EU Legislation	Rules on producing and labelling organic products (Organic standard); biocontrol; trade standards and border controls.
UK Regulation	Food Standards Agency Code of Practice
Private standards	LEAF, Soil Association Organic, Red Tractor, GlobalGAP, individual corporate standards (e.g. supermarkets), etc.

POLICY CONFLICTS AND OPPORTUNITIES

Planning & Environment

The anticipated difficulties with regulation of the changing farming landscape present significant challenges. **Supplementary planning policy and permitted development rights (PDRs) for agricultural diversification and future farm needs must be considered a strategic priority.**

For example, developing a clear pathway for agricultural fields to become community allotments aligns with broader goals of sustainable development and community well-being by providing green spaces and promoting more local food production.

Expanding PDRs for structures like polytunnels, fences, and mobile chicken coops removes bureaucratic barriers, enabling farmers to innovate and diversify, thus boosting productivity and resilience. Mobile polytunnels, for example, enable year-round cultivation of high-value crops, while mobile chicken coops facilitate rotational grazing systems that improve soil health and animal welfare. The temporary nature of the structures required for these highly diverse polycultures can contribute immensely to a resilient agricultural landscape.

Farms developing a social offering, such as care or retirement farms, may need extra facilities to offer a safe and compliant service. **These developments clearly deliver value across multiple policy channels yet may still not pass Planning**. When a negative farm diversification planning decision is then overturned by the Council of Ministers, this creates unnecessary burden across the system. Introducing more flexibility for small rural and marine development that demonstrates value to the local food system would be a supportive improvement.

By streamlining the planning process for such developments, farmers are empowered to adapt their operations in response to evolving market demands and a changing climate. Currently, there is no clarity within planning policy and there are varying degrees of understanding of what is permitted.

Agricultural land controls governing change of use need updating. Diversification of crop choice and production methods means **early adopters will bear the burden of outdated legislation** that has no provision for innovative production set-ups.

Agroforestry and alley cropping systems, for example, do not fall into any of the existing categories and may therefore struggle to get permission.

While the current protections on occupation of agricultural land are necessary, the **official restriction on who can engage in farming does not support current health and productivity policies**. Although the interpretation has recently become more flexible, the definition of "bona fide agriculturalist" may be too restrictive, effectively excluding part-time farmers, those whose income primarily comes from elsewhere, those participating economically through "in kind" or exchange, and those without a sufficient profit level. In a climate where new entrants or any farmer may need a second income or flexible operations, the definition excludes people who could significantly contribute to the agricultural sector.

Environmental Health

Anticipated regulation is currently spreading the burden of compliance unevenly across food businesses. Food safety is very important, but it should not exacerbate inequalities between organisations with differing levels of resources.

The Environmental Health Department is responsible for administering and enforcing legislation related to environmental health, including the management of the Eat Safe Food Safety Scheme. "Natasha's Law", introduced in the UK in 2021, requires all food businesses to include full ingredients labelling on pre-packaged food. Currently, in Jersey, it isn't a legal requirement for a business to display all allergens within their food; however, Environmental Health has said it is working to introduce similar legislation. Jersey does not have a modern and comprehensive Food Law, leading to ambiguity and uncertainty about the communication of health and safety standards for food establishments. Interview evidence revealed it is **difficult for food businesses to determine compliance, with Environmental Health prosecution and enforcement action is not consistent.**

Unlike larger UK food suppliers and businesses, such as Waitrose or M&S, that have internal staff dedicated to implementing environmental health and safety protocols, **smaller food businesses are disproportionately affected by the regulations for not having adequate support to develop a food safety culture**. Food safety culture encompasses the attitudes, behaviours, and importance placed on food safety within an organisation. It involves how everyone in food, from owners and managers to employees, consistently thinks and acts to ensure the food they prepare or serve is

safe. A robust food safety culture is characterised by individuals taking responsibility, pride, and care in producing safe food, recognising the significance of food safety and the potential consequences of lapses.

Public Health

The Health and Wellbeing Framework[46] indicates that the Government of Jersey is working to address the root causes of preventable diseases in a coordinated and participatory way. Following on from the framework, Public Health conducted food systems research project with CEDAR at Cambridge University to determine systemic intervention points to improve public health outcomes. The result of the research placed agency in the Rural Economy department, by determining that quality, locally produced food was a systemic solution to good health.

Public food procurement is a major lever in restructuring local food chains and should be used to greater effect. Increasing access to fruits and vegetables is an integral part of all eating guidelines. Government could be a major supporter of local, agroecological food production by introducing staggered targets for local food sourcing, which ramp up slowly and are adjusted as supply increases. These targets need not carry an excess certification burden (for example, by stipulating Organic), as the small network of local suppliers can be managed with locally-adapted indicators for sustainable production.

Public Health could collaborate with Rural Economy to determine local food sourcing diversification measures, so that farmers are supported to provide the foods which will make positive impacts on Public Health. Farm diversification and secondary cropping are currently credited on the RSS and could be further developed in line with procurement strategies.

Minimum Wage

In January 2024, the Government increased the minimum wage to £11.64 per hour, a 10.9% increase from the previous rate of £10.50 per hour. This decision came in response to the challenges of rising living costs, particularly affecting lower-income households and businesses that spend a larger portion of their earnings on essentials such as food and energy. Consequently, some Ministers, supported by the charity

[46] https://www.gov.je/Health/HealthWellbeingFramework/Pages/HealthWellbeingFramework.aspx

Caritas Jersey, are advocating for raising the minimum wage to the living wage of £13.41 per hour.

While this increase could benefit workers by providing a higher income, **it could also disproportionately impact the agricultural, retail, and hospitality sectors**, straining business profitability and potentially reducing employment opportunities and apprenticeships for young and unskilled workers.

This increase could be one of the many contributing factors to Jersey entrepreneurs' reluctance to hire employees, preferring instead to operate as single-person businesses[47]. Advancements in technology mean many tasks that previously required staff can now be performed automatically. Additionally, employing staff adds complexity and added costs, including licensing, payroll requirements, and training. Lastly, finding candidates with the right skills and commitment can be a significant challenge.

The Government of Jersey is aware of the labour shortages and "serious demographic challenges" the island faces. Given the complexity of the situation we would like to see inclusive approaches to the debate including a full analysis of **sector-appropriate approaches to raising the minimum wage.**

Climate Change & Circular Economy

Climate change policy is not well developed for island agriculture. So far, there is no assessment of need or review of how Jersey land-based businesses will cope with changing climatic or the knock-on effects of international trade disruptions. **Businesses need to consider the impacts of climate disruption on critical dependencies, and investigate alternative or local options** ahead of time.

Under the Greenhouse Gas Protocol, scope 3 emissions are those emitted from transport and distribution and from purchased products. Current GHG assessments do not include scope 3 emissions and therefore do not capture the emissions associated with importing large volumes of food or agricultural materials, nor the emissions-intensive processes used to produce these products elsewhere. Without considering scope 3 emissions, it appears that local food production could result in increased emissions (although this is also debatable and dependent on production methods). The **agriculture sector could suffer perverse outcomes** if a more nuanced perspective on emissions is not established.

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[47] https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/Labour%20Market%20December%202023.pdf

As has been highlighted in earlier sections on waste and nutrient flows, there are numerous opportunities to develop circular approaches in food businesses. **A major barrier to these developments is the lack of cost to waste production.** Businesses that champion waste reduction with innovative processes often face uncertainty and risk, with no significant savings or minimal competitive advantage.

Agri-tech

Digital policy includes support for an advanced digital infrastructure which enables the adoption of digital technologies. However, digital policy on skills has no consideration for digital skills in food related businesses, focussing instead on school-age skills development. There are **opportunities to deliver specific workshops for businesses across the food system** on topics such as the use of AI in wholesale or retail, and to do more to help businesses learn about digital innovations.

Rural Support Scheme

One of the most significant policy frameworks influencing local food production is the Rural Economy Framework and the Rural Support Scheme (RSS) defined within it. The RSS has radically evolved in its last iteration and will continue to develop to support the delivery of public goods by farm businesses (e.g. countryside management and access). Detailed suggestions for development of the RSS to better support farm and land managers in increasing business resilience, and overall the resilience of Jersey's food system, are included in the Strategic Recommendations section.

General recommendations include using the RSS to harmonise fragmented food policies and encourage better trans-departmental working, such as between digital innovation or Public Health, and rural enterprises. Greater emphasis on agricultural innovation can also be expressed in the RSS.

While specific measures with the RSS are recommended, **access to the RSS itself needs further consideration**. Currently, businesses must achieve certification to either LEAF Marque or Organic standards to remain on the scheme after a two-year grace period. However, for producers who don't access markets where these certifications offer additional value, an alternative qualifying route with an element of third-party validation needs to be in place.

We recommend allowing data-driven methodologies that support good agronomic, environmental and social management. An immediate step could be to allow RSS participation when a complete set of management plans are submitted by the business, combined with a data collection plan and results. Eventually, the RSS could

evolve to use a holistic farm sustainability framework such as the Global Farm Metric[48], which is currently in development.

Competition Commission

The likely acquisition of 38 food shops across the Channel Islands by UK supermarket giant Morrisons demands a comprehensive evaluation of the impact on competition dynamics, supply chain ownership, and the long-term resilience of the food system. The authority must broaden its criteria to encompass factors such as the viability of local businesses and suppliers, ensuring they are not unduly marginalised by the entry of a major foreign-owned retailer. Legal protections for smaller independent growers and businesses should be considered, alongside measures to support the vitality of the local agriculture industry. **The trade-off between maintaining a supply of cheap food and ensuring long-term resilience requires a deeper examination of the impact of these deals over time.**

The JCRA should consider implementing stricter restrictions for new entrants into the supermarket and wholesale sectors, ensuring they are aware of and incentivised to use the existing array of local services and products[49]. Without such measures, existing retailers might neglect their support for local growers and businesses, presuming it to be economically uncompetitive. Mandating that **new supermarkets source a portion of their products locally** would support local productivity and foster a more balanced economy for Jersey.

Emergent Strategies

Twinned rural development programmes offer opportunities to co-develop education, skills, and businesses with other regions. While Jersey already exports its expertise and the Jersey cow, the island could benefit more from collaborations, for example by participating in the *Land to Plate* exchange between Cluj-Napoca, Romania, and Liffre, France. Governmental-academic-industry partnerships offer the opportunity to build social narratives and knowledge sharing for resilience-enhancing design. Partnership approaches may also enable Jersey to access EU and UK funding opportunities and students.

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[48] https://www.globalfarmmetric.org/

[49] https://statesassembly.gov.je/scrutinyreviewsubmissions/submission%20-%20retail%20strategy%20-%20amal-grow%20-%208%20february%202007.pdf

MARKET DYNAMICS

QUESTIONS HYPHA ASKED:

- WHAT IS IMPORTANT TO UNDERSTAND ABOUT RESILIENCE IN GLOBAL TRENDS?
- WHY IS IT HARD TO DEVELOP A LOCAL FOOD BUSINESS?
- ARE THERE DIFFERENT APPROACHES FOR LOCAL BUSINESSES?
- HOW SHOULD DECISIONS BE FRAMED TO SUPPORT INVESTMENT INTO THE LOCAL FOOD SYSTEM?

Conventional Food Business Approaches –Unintended Consequences of High Efficiency & Economies of Scale

1. Significant impact on climate
2. Limited nutrient cycling
3. Poor health outcomes
4. Increasing inequality
5. Fragility of just-in-time supply

The 5 outcomes above attract significant investments to preserve the competitiveness of existing organisations. **Innovations in supply chains have emerged as a cornerstone of these investments,** with an increasing number of businesses establishing new ways of processing and distributing food to access new markets. However, there are notable differences in how businesses are designed to support the resilience of local food systems.

"Disruption, in the context of business, refers to the introduction of a new product or way of working that has the effect of overturning existing patterns in an industry. Disruptive innovations arise when a company looks beyond what currently exists to what wants to exist. Such a company learns to see what others can't see – emergent patterns and tendencies of an evolving world." –Carol Sanford

How businesses operate on the global market has long-lasting impacts within communities and the resilience of local food systems. Many globalised business models externalise costs related to health, the environment, society, and other factors. While trade is essential to efficient resource use, often, global business models are not designed to add positive value in communities.

BUSINESS AS USUAL

- CONTINUOUS GROWTH & SCALE
- TRANSACTIONAL
- CONVENIENCE & PRICE
- EXTERNALITIES
- UNIVERSAL
- UNIFORM
- MAXIMISE PROFITS TO SHAREHOLDERS
- SHORT-TERMISM
- COMPETITION
- MEASURE SUCCESS BY GROWTH AND PROFITS

RESILIENT BUSINESS MODEL

- SCALE-LINKING
- RELATIONSHIPS
- VALUES & CONVENIENCE
- EMBEDDED. INTERNALISE TRUE COST
- CONTEXTUAL
- DIVERSE
- DISTRIBUTED PROFITS. STAKEHOLDER CAPITALISM
- LONG-TERMISM
- COLLABORATION
- MEASURE SUCCESS BY IMPACT, SUSTAINABILITY, TRIPLE BOTTOM LINE

Challenges and Opportunities for Local Businesses

The current market system in the food industry poses significant barriers to innovation and alternative food systems due to entrenched mindsets, investment models, and governance frameworks. This dominance by established businesses creates challenges for new entrants, including resource advantages that favour incumbent businesses. Furthermore, **decision-making is often driven by basic assumptions and common market scales, utilising vulnerable business frameworks**, which can hinder innovation and alternative approaches.

Different Approaches to Business

> *"There's nothing a good business plan can't fix." –local entrepreneur*

The main difference between 'business as usual' and a resilient business model lies in their approaches to production, distribution, consumption, value addition, and innovation. Vulnerable businesses prioritise efficiency and economies of scale, at the expense of resilience and adaptability. Resilient, localised food systems, on the other hand, emphasise community-based food systems that are rooted in local culture, history, and geography.

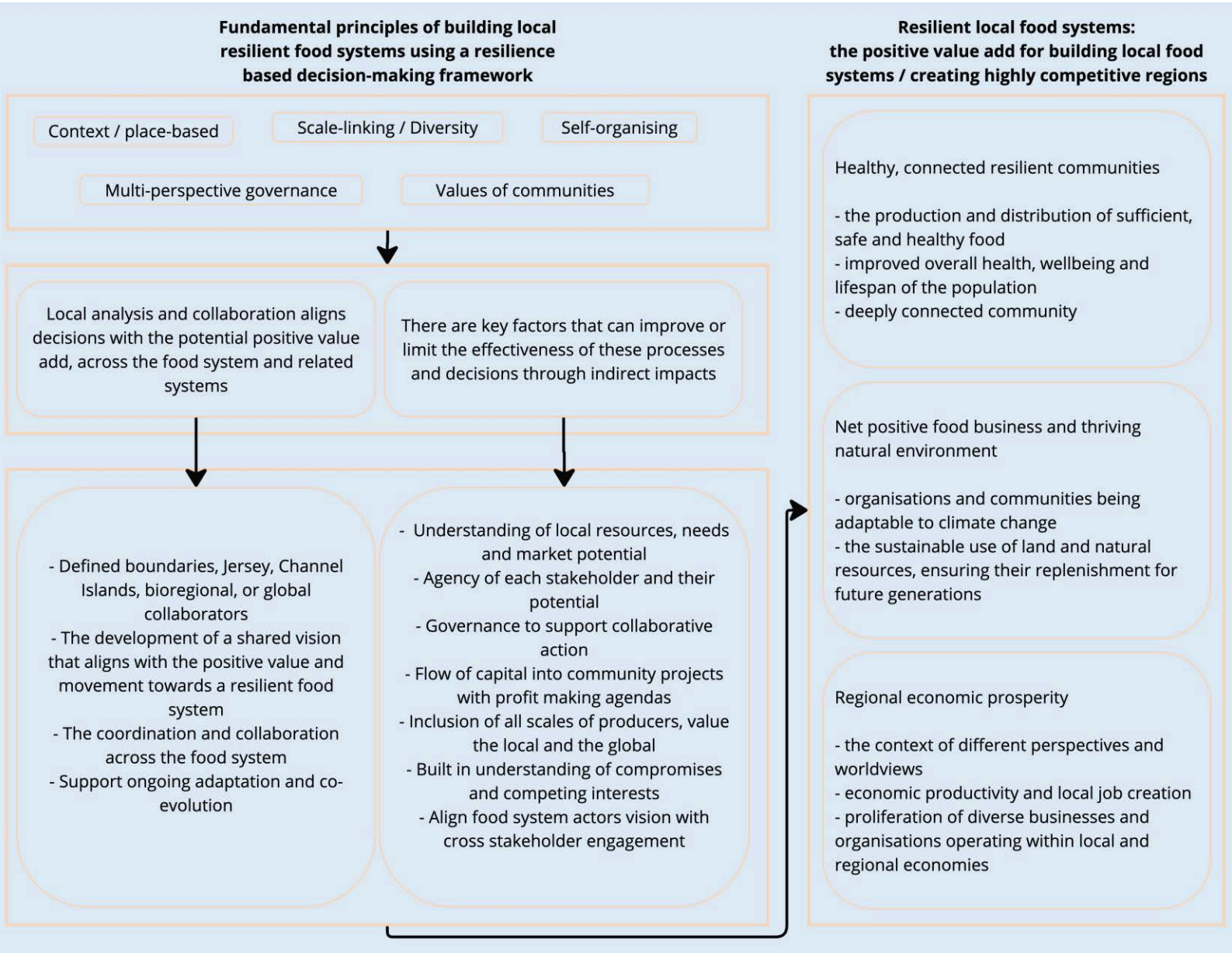
Resilient business models are successful when they use **scale-linking, which connects small-scale producers with larger parts of the supply chain to enhance long-term resilience.** Scale-linking spreads risks across multiple entities, making it resilient to market fluctuations or disruptions. Businesses based on relationships across different scales have been shown to fare better over longer periods, suggesting that these relationships are crucial for long-term success.

The unique nature of local economies is their ability to collaborate across the system through relationships, which leads to greater resilience. While a traditional cooperative model allows smaller-scale businesses to build economies of scale, **collaboration emphasises the diversity and autonomy of individual actors** within the food network working towards a common goal.

Understanding how differing values play a role in building a more resilient business is key. Local businesses have more leverage with value-led markets through their proximity to their consumers - this is critical competitive advantage for local businesses, offering a buffer against market volatility. Entrepreneurs could challenge the common assumption that Jersey consumers are all the same and only want cheaper food. The diverse range of cultures and values present in our society reveal the potential for a range of product innovations. Additional markets could be found within the growing proportion of islanders with health challenges.

Decision-making Framework Towards Resilient Food Systems

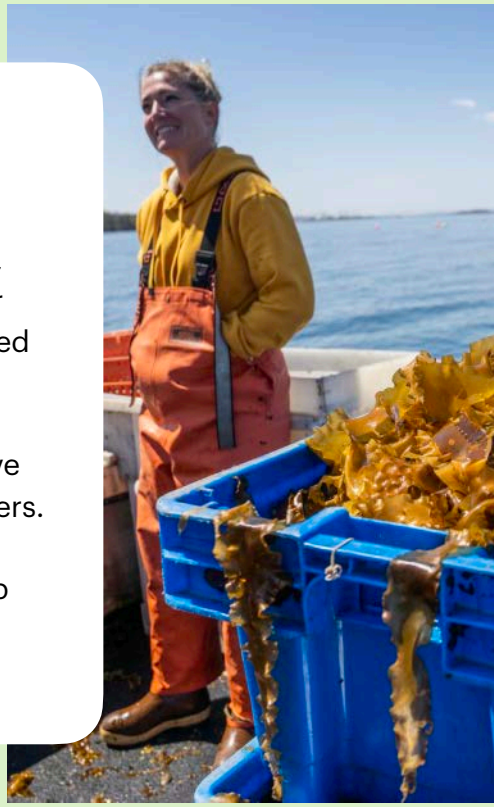
Building businesses based on good relationships within a place will lead to a more resilient local food system. A healthy local market system requires an integrated approach to investments and business modelling. This table below covers a resilience decision-making framework for local businesses.



GLOBAL INSPIRATION

In this section, we share insights from around the world where people have seized opportunities to improve food resilience through a variety of mechanisms.

Shared Infrastructure



Greenwave Seaweed Source is a free app that streamlines connections between active seaweed businesses to align kelp supply and demand. Qualified companies can create comprehensive profiles, enabling them to discover new partners, initiate forward contracts, and get real-time updates on supply or purchasing offers. Users can search for partners based on seaweed species, format, or location, and gain visibility into regional and national seaweed networks. The Seaweed Source is designed to open new sales channels for small and medium-scale regenerative ocean farmers by leveraging GreenWave's robust network of buyers. Previously, buyers struggled to connect to smaller growers in the North American seaweed sector, but by digitising the relationship and giving farmers lots of visibility into the market The Seaweed Source will help to build robust value chain relationships.

Alternative Food Networks

Amidst diverse challenges, **alternative food networks (AFNs)**, which deliver locally harvested products to local and regional communities, emerge as notable bright spots due to their resilience and adaptability. Food cooperatives are an example of AFNs which engage with capital in an entrepreneurial way, and yet also find a balance between control and democracy.

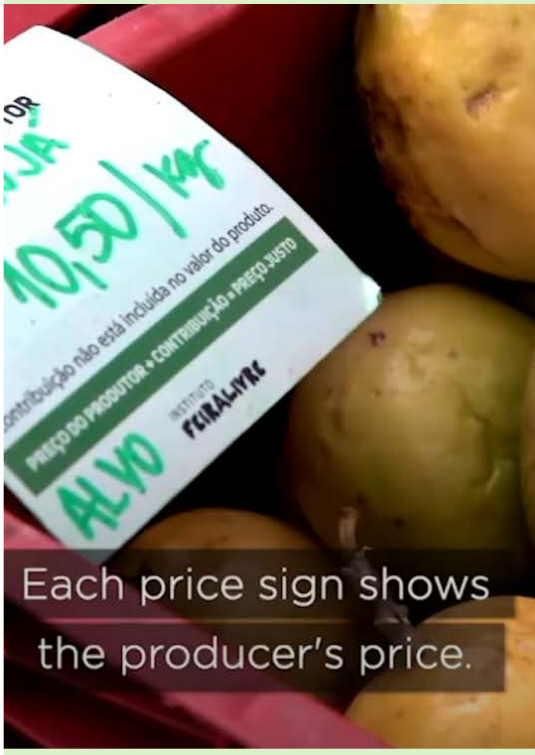
There are many examples of successful food coops in the UK and abroad: **True Food, Reading; Unicorn Grocery, Manchester** to name a few. **La Montañita Food Cooperative (New Mexico, USA)** went further than a buying group or retail store. In their Foodshed project, La Montañita identified the structural and systemic barriers to more local food in the market. The group then set up and operated a distribution service to overcome the food desert created by large retail distribution centres bypassing their area. It also implemented targeted business support or referrals for local producers, marketing support, a pre-payment scheme, and processing facilities for creatively use of surplus or slightly damaged produce.

Closing the Loop

The **Palopuro Agroecological Symbiosis** (AES) is a multi-enterprise network which is a pilot model for sustainable food and energy production, located in Hyvinkää, Finland. Palopuro is a pioneering cooperation between different producers (cereal farm, henhouse, organic vegetable farm), food processing (bakery), and a biogas plant generating both fuel and fertiliser. The Palopuro AES is the first known full application of industrial symbiosis to farming and food production in the world. Neither food processing at farms nor farm-scale biogas production are new ideas, the novelty of AES is in combining both concepts with several farms, creating a mutually beneficial, locally integrated, agro-food industrial complex that minimises waste and emissions, relies on renewable energy, maintains fertility of the soils and recycles nutrients. A farm market and other events build on the community aspect, development of social capital and rural vitality. Generally, an active local spirit and engagement is needed for an AES to form and exist. Agroecological symbioses represent one solution to restructuring the food system and solving problems that the prevailing linear resource flow and globalisation of markets have caused.

Dynamic Procurement

Connect the Dots aims to create a food system network that tackles social inequality and supports regenerative farming. Set up for the São Paulo peri-urban zone and the surrounding region, the programme supports local farmers and procures vegetables directly from them, to provide healthy food for vulnerable people. Technical assistance, training and equipment are made available through municipal 'Houses of Ecological Farming' and via the 'Technical Assistance and Rural Extension' (ATER) Programme, which also helps farmers access financial support. The municipality purchases produce from farmers registered under this scheme at 30% above market value which helps to incentivise their transition to organic, regenerative practices. The Municipality also provides access to warehouses and a network of street markets and small food retailers, which increases access for consumers across São Paulo. Connect the Dots supports local farmers as they transition to regenerative practices. Supporting smallholders in their transition to regenerative farming practices ensures that peri-urban land is economically productive and contributes to urban populations' health, while providing habitat for biodiversity.



Parent Power

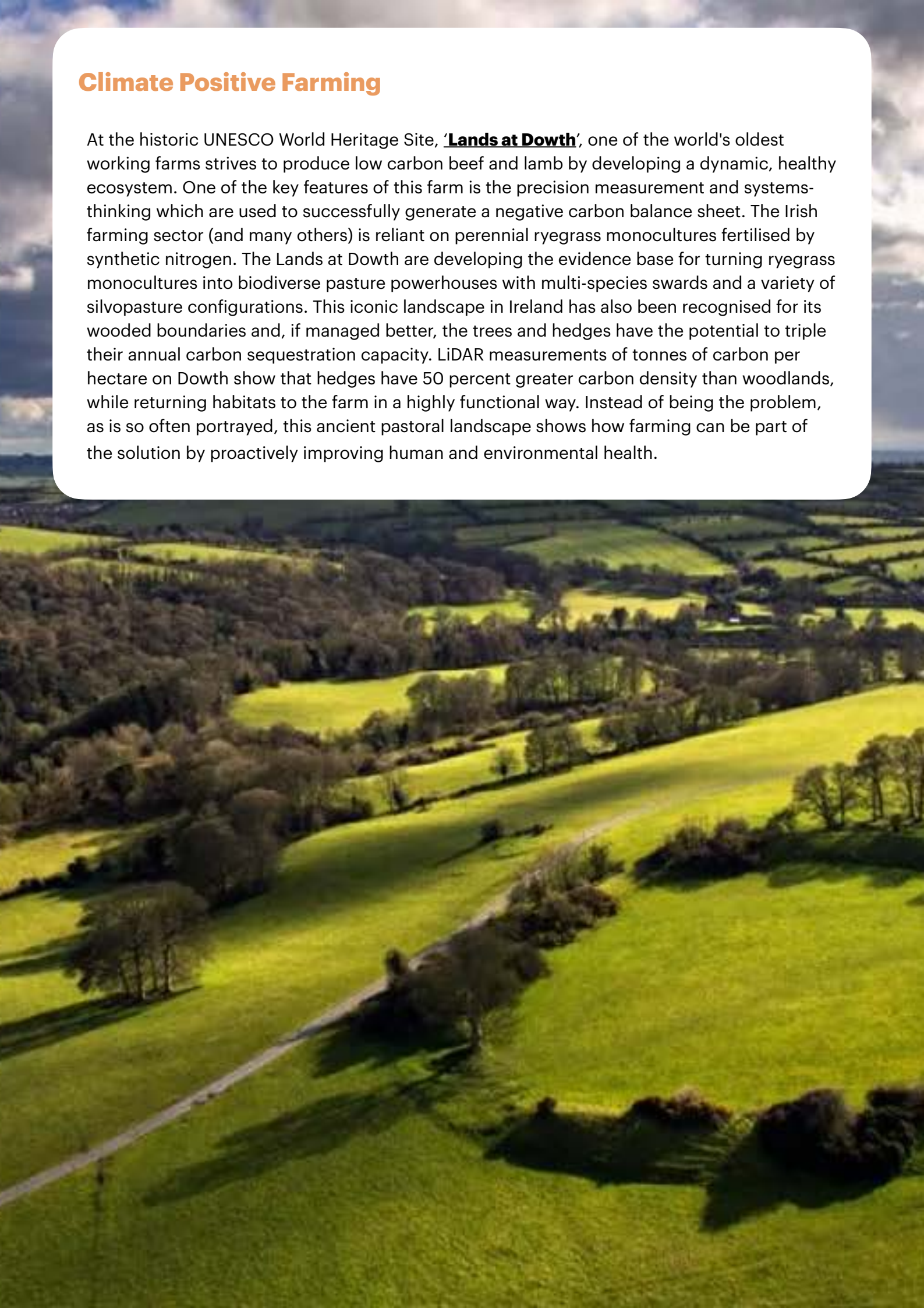
Agricourt is a community procurement platform that emerged from an awareness-raising initiative by parents in the Drôme Valley, France. In 2009, they founded a not-for-profit association to promote local and fresh food procurement for school canteens. Realising that awareness alone was insufficient, they engaged municipalities, schools, and farmers to identify logistical barriers to accessing local, seasonal, quality food. They developed a procurement platform with business rules and sourcing practices that included lower trade margins on local products, offering higher prices to farmers and encouraging customers to buy these products. The platform's ethical approach and facilitation services expanded to support young farmers and small-scale agriculture through the Compagnons de la Terre farm incubator. Agricourt now collaborates with 36 local producers and around 40 local purchase groups, nurseries, and schools, significantly impacting local distribution and consumption patterns.

Peri-Urban Land Use

The AMAP veg box was launched by a group of city dwellers from a peri-urban area of Paris. Now called **Terre et Cité**, the group aims to encourage local farmers to produce food for local consumers to legitimise the preservation of farmland threatened by urbanisation. Green spaces are appreciated by urban citizens, but there are inevitable tensions caused by urban development. In order to create interdependence between farmers and non-farmers to foster the preservation of the farmland, this group approached the conventional grain farmers in the area to discuss building a local food chain. Four of the eight farmers of the plateau answered their call and are now organic with diversified local food chains. Terre et Cité successfully lobbied to save these farms from municipal road development, and fundraised to buy farmland for the community when a private investment project threatened parts of the project. The other farms had no community base to protect them from development and are no longer farmland. Terre et Cité's vision of the future of their area is based on an environmentally friendly agri-food network supplying household consumers but also local catering and especially the businesses, universities and schools in their area.

Climate Positive Farming

At the historic UNESCO World Heritage Site, '**Lands at Dowth**', one of the world's oldest working farms strives to produce low carbon beef and lamb by developing a dynamic, healthy ecosystem. One of the key features of this farm is the precision measurement and systems-thinking which are used to successfully generate a negative carbon balance sheet. The Irish farming sector (and many others) is reliant on perennial ryegrass monocultures fertilised by synthetic nitrogen. The Lands at Dowth are developing the evidence base for turning ryegrass monocultures into biodiverse pasture powerhouses with multi-species swards and a variety of silvopasture configurations. This iconic landscape in Ireland has also been recognised for its wooded boundaries and, if managed better, the trees and hedges have the potential to triple their annual carbon sequestration capacity. LiDAR measurements of tonnes of carbon per hectare on Dowth show that hedges have 50 percent greater carbon density than woodlands, while returning habitats to the farm in a highly functional way. Instead of being the problem, as is so often portrayed, this ancient pastoral landscape shows how farming can be part of the solution by proactively improving human and environmental health.



Pitch up!

Pitch Up! connects holistically-managed estates and regenerative farmers with sustainable food producers and other like-minded rural enterprises. Working together in 'circular communities', people share land, raw materials, retail or production space, by-products, ideas, knowledge, contacts, equipment, costs and whatever is needed to help good ideas grow into successful businesses. Pitch Up! is an annual call for sustainable businesses and start-ups to pitch their plans on how they would use the land/ space at Kingsclere and Balcaskie Estates. If successful, it's an opportunity for existing and new entrants to be part of a like-minded community that grows together and supports itself. Projects must fit with the four core Pitch Up! principles, which are locality, sustainability (encompassing low impact, circular, ecological, future generations concepts), being complementary to existing operations and partners, and innovation.

FiPL Fund

The Farming in Protected Landscapes (FiPL) programme is part of Defra's Agricultural Transition Plan. The programme offers funding to farmers and land managers in AONBs, National Parks and the Broads who develop projects to deliver value for people, nature, climate and place. Small FiPL projects of less than £10,000 are approved by scheme administrators, while larger grants are subject to a collaborative process with local stakeholders. Projects should either support nature recovery, mitigate the impacts of climate change, provide opportunities for people to discover, enjoy and understand the landscape and its cultural heritage, or should protect or improve the quality and character of the landscape or place.

Alderney Roots

Alderney Roots The family-run market garden business, Alderney Roots, serves as an example of what is achievable when a community is dedicated to cultivating a supply of local, sustainable agriculture. With a fervour for promoting healthy lifestyles, ensuring food security, and fostering a resilient agricultural economy on the island of Alderney, the business places a strong emphasis on engaging the island's youth in education and development. Operating on 4 acres, it cultivates and delivers 13 varieties of produce over 36 weeks, providing a veg box per week to 250 households (averaging 2.5 persons each) at a cost ranging from £15 to £30. Their products range from salads, herbs, kale, carrots, tomatoes, and cabbages. A rough calculation shows Alderney Roots' production model could feed 818,700 people with Jersey's agricultural land size.

Brazil's School Feeding Programme

Brazil's National School Feeding Programme has some very special governance for public food procurement. Brazil's institutional food procurement programmes are strategic and comprehensive public policies for combating hunger and poverty and promoting rural and sustainable development. The programme is funded by national government but delivery is decentralised to the level of individual municipalities and in some cases individual schools. School menus are developed by professional nutritionists based on nutritional requirements, use raw or minimally processed foods, respect seasonality, and support local food culture. The law also has mechanisms to encourage procurement from local family farmers, with preference for organic or agroecological food. The program is designed to enhance the production and distribution capacity of local farmers' cooperatives, actively involve citizen-consumers in negotiations with local authorities, and ultimately create an institutional framework that fosters deliberative engagement and guarantees the quality of food used.

Connecting Farming & Healthcare

Let the food - and the soil it came from - be your medicine.

Local Food Driving Better Health Outcomes

HarvestCare was incubated in Fresh Ventures Studio, a programme designed to nurture systems businesses. With the mission to connect regenerative farms with healthcare initiatives, HarvestCare exemplifies a farm business that uses science, farming, and partnerships to improve health outcomes. The enterprise facilitates Food as Medicine models using the framework of Food Pharmacy, which provides patients with chronic diseases food prescriptions and support from health professionals to successfully change dietary behaviour. They work with pioneer farmers, community members, and doctors to create a healthcare system rooted in the heart of communities. Their research shows that health outcomes linked to nutritious food can only be determined by the improvement of soil rather than certification process methods.

Local Food Advocacy & Support

Our Food 1200 Wales emerged from a series of online conversations about local food, organised during Covid. Our Food 1200 was established as a community benefit society in 2022, to provide local leadership for rebuilding a local food economy in partnership with the Conservation Farming Trust, a Welsh charity. Our Food 1200 believes in change at scale. To commit itself to that, the Directors decided to put 1200 into the name of the organisation – 1200 acres of agroecological growing of fruit and vegetables for local markets. This ambitious target is enough to trigger a recovery of the whole local food economy, decimated by the global food system adopted in the UK since the Second World War. Our Food 1200 will build a reliable and affordable supply of food for all - in the cities, the Welsh Valleys and rural areas. The society will do this by growing more food in Wales, which creates new jobs in farming, with new skills; and by creating new supply chains from Welsh farms into cities, the Valleys and rural areas, with farms receiving a fair price. Active schemes include a land purchase and leasing programme to support small growing operations, collaboration with planners to enable appropriate rural development, development of locally owned supply chain, and ongoing campaigns to develop food policy in Wales.

STRATEGIC RECOMMENDATIONS

We have put forward 67 individual recommendations that aim to improve the long term resilience of Jersey's food system. They cover a range of types of policy levels to reflect the nuance and complexity of the food system. The recommendations also sit across different government departments and within business and community. To achieve resilience, strategies include nurturing a culture of business innovation and risk-taking, providing support and incentives for crop experimentation and local markets for goods and services, and creating investment and pathways for the adoption of new technologies and small footprint/high-value business models.

The table below gives details on the types of policy levers used.

Policy type	Definition	Example
Organisation	Macro and infrastructure	Development of a food hub
Communication	The organising and delivery of information	Central communication platform for all rural economic development - The Food Foundation
Regulation	Enforced behaviour change	Updated Planning Policy
Finance	Distribution of grants & loans for revenue	Defined KPIs for grant allocation
Payment	System of incentive	Credits for environmental health training
Innovation	Research and commercial support	Support connections with agricultural universities
Collaboration	Building collaborative strategies	Establishment of grants that value collaborative strategies
Market Development	Building new markets	Research into the home care food market

We also show the interventions in interconnection diagrams to highlight the integration in the policy design. Each recommendation is linked to elements of the Jersey Performance Framework so impacts can be measured by an existing audit structure. The interconnection diagrams (p. 93-97) reveals that greater communication between departments is required to realise the potential value of the recommendations. We recommend that cross-cutting issues such as health and food use a holistic approach that takes advantage of the well connected Government community. Recommendations are delivered across various timescales: immediate (within weeks); short (1-6 months); medium (6-18 months); and long (>18 months).

STRATEGIC RECOMMENDATIONS

CATEGORY / TIMEFRAME	ACTION BY GOVERNMENT	RATIONALE
Policy and regulation **Short**	All Panels must consider representation across the industry. Panels should find ways to secure the involvement of smaller or less powerful representatives to ensure a wide range of views are included	Panel decision-making needs to consider both the incumbents and potential future developments (which could threaten the incumbents) to make decisions that favour resilience and diversity. Policy hallucinations occur too often because personas are not considered; they don't arise from the limited representation.
Policy and regulation **Short**	Rural Economy: Deliver policies LE1b and LE1c in the Rural Economic Framework. Adjust the definition of a "bona fide agriculturalist"	The official interpretation of "bona fide agriculturalist" does not allow for part-time, slowly maturing, exchange or in-kind based, community, and hybrid farming approaches. The REF recognised the need to adapt the definition, and in practice, control of the occupation of agricultural land has become more flexible, but the letter of the regulations and law has not changed. This makes organisations operating in the grey areas vulnerable and prevents more general access.
Policy and regulation **Short**	Planning: develop understanding and framework for future farm diversification requirements	Planning must adapt to allow appropriate development on farms to deliver value in the local food system and increase its resilience. and prevents more general access. Similarly, the law governing changes of use should become more accommodating of novel production setups that don't fall into the current categories to support the diversification of rural businesses.

Policy and regulation **Short**	Planning: expand permitted development rights for movable farm objects (mobile hen houses, mobile polytunnels); remove planning requirement for small developments (raised beds without foundations, water supply, small sheds) on community gardens and allotments	Supplementary planning policy and expanded permitted development rights (PDRs) will directly support agricultural diversification by enabling community allotments, reducing bureaucratic barriers for essential farm structures for diverse production set-ups, and clarifying planning policies to empower farmers to innovate, diversify, and better adapt to evolving market demands and climate changes.
Policy and regulation **Medium**	Circular Economy: regulatory bodies governing household and commercial food waste should develop a collaborative process to engage with other stakeholders to jointly find solutions to island food waste	Food waste is a costly, primarily imported, source of nutrients that could partly replace imports of fertiliser and compost while reducing deliveries to the incinerator. With targeted policy support and collaboration, pathways to repurpose food waste could be identified and implemented to increase island self-reliance.
Policy and regulation **Medium**	Public Health: recommendations for business	The provision of very unhealthy foods in Government concessions and in partially publicly funded businesses (i.e. Jersey Business loan scheme) should be reduced. Public Health should stimulate healthier food environments by giving guidelines that food businesses can integrate into bids for public procurement and applications for public money.
Policy and regulation **Short**	Public Health: implement requirement for locally sourced foods in procurement contracts	Public food procurement is a major lever in restructuring local food chains and should be used to greater effect. - Government could be a major supporter of local, agroecological food production by introducing staggered targets for local food sourcing, which ramp up slowly and are adjusted as supply increases.

Policy and regulation **Medium**	Employment Forum: Be transparent about minimum wage debate. Use an inclusive methodology such as Global Living Wage's Anker Methodology to increase stakeholder engagement and fairness in Living Wage debate	The huge disparity between the financial services sector and other industries must be openly addressed to ensure equitable treatment of all industries. Food and agri-businesses are low-waged and at risk, threatening the resilience of the food sector.
Policy and regulation **Medium**	Employment Forum: consider making allowances for adjustments to minimum wage in agriculture, food, and hospitality.	Government needs to consider social justice and how increasing the minimum wage could have perverse effects by eliminating business profitability, reducing apprenticeship opportunities, and employment opportunities for young people and unskilled workers. Sectoral adjustments to the minimum wage would be a more balanced approach, taking into account the unique scenarios faced by different industries.
Policy and regulation **Medium**	Competition: consider restrictions/ stipulations for new retailers and wholesale businesses	The JCRA should consider requirements for businesses in the supermarket and wholesale sectors to ensure support for local products and to help avoid negative impacts of food imports on local productivity. This includes mandating local product sourcing and a potential margin cap on local produce to increase the competitiveness of local products. The Commission should examine the long-term impacts of a narrow view on price competition for the island's economy and local productivity.

Policy and regulation **Long**	Investigate the potential of import controls on food to support a more productive and diverse local food economy while retaining competition and choice.	The risk of negative outcomes must be balanced with the long view on island food resilience. Jersey is very vulnerable to global supply chain shocks and will impacted by continuing price increases. The only way to offset this is to develop a robust local food economy that will serve the island with less reliance on geopolitical developments and extreme weather elsewhere.
Policy and regulation **Short**	Environmental Health: establish new Food Law to build food safety culture	The strategic recommendation emphasises the need for a modern, comprehensive food law in Jersey to address current ambiguities and ensure consistent enforcement. This will support smaller food businesses in developing a robust food safety culture akin to that of larger counterparts.
Assets and Infrastructure **Medium**	Deliver REF policy RD4c: review the abattoir and make necessary investments for a consistent service that meets current and future needs.	Losses to livestock farmers are severe. The abattoir is an essential service for the local food economy and should be appropriately funded and managed.
RSS **Short**	Develop incentives in the RSS for participants to connect to other policy channels, such as Environmental Health training or Jersey Business' 4-day business improvement programme.	Increase harmonisation across food policy areas; supporting individual farms and groups of farm businesses to develop and/or diversify farm businesses.
RSS **Short**	Include credits for part-time employees	Part time employment can be appealing for staff and owners; allow for slow ramp up; enable development of training and skills; enable cross skilling and hybrid vocations; improve wellbeing and economic opportunities; improve community participation and cohesion in rural economy; diversification of employment opportunities.

RSS **Medium**	Consider credits to incentivise collaboration and cooperation, e.g. a credit for membership of a cooperative, participation in the Rural Panel, or board position	Improve accessibility for unpaid board or panel roles, foster cross-industry connections and provide more opportunities for groups of partners to develop through establishment of cooperative or mutual organisations.
RSS **Long**	Consider how to adopt nutritional outcomes into the RSS	The RSS incentives should recognise quality as well as quantity. Access to nutritious local food could be supported by implementing a practical link between produce quality and the RSS, but mechanisms need to be fully explored. Approaches using nutritional density could enable food prescribing for health outcomes.
RSS **Short**	Develop and implement a communications plan and website for the RSS	The resources available through the scheme are not well understood and occasionally completely unknown. The RSS is a world-class programme and should be accessible as an exemplar to other policymakers and researchers. Improving the delivery of the RSS will help protect it from future challenges and reduce reputational risk when misunderstandings occur.
RSS **Short**	Implement a minimum credit lifespan of 3 years and 5 years for credits requiring capital investment	Indicate longevity of crediting programme and offer predictability.
RSS **Medium**	Develop audit, accounting and transparency of the RSS	Develop professionalism of the scheme and protect it from future criticism & challenge.

RSS **Medium**	Continue to professionalise the Rural Panel and sector meetings to increase accessibility, understanding, clarity of purpose and effectiveness.	Increase robustness of Panel decision-making and quality of advice to Government. Provide a solid framework for continuing the panel outside the political decision-making process.
RSS **Medium**	Establish a workers committee within the Rural Panel	Workers in the rural economy are not well represented and have no direct route for communication to clearly express their needs. Workers are essential for the resilience of farming businesses yet do not have pathways to influence decision making.
RSS **Medium**	Review the accreditation to Organic or LEAF requirement for RSS participation - suggest broadening the range of qualifying certifications including monitoring based programs	The market value of certification for smaller farms is questionable and the difficulties obtaining required organic inputs both suggest that the requirement for certification could exclude viable operations from the scheme. Alternative access criteria should be developed, based on evidence from farm plans, data collection and potentially farm visits or other 3rd party protocols.
RIS **Medium**	Increase the grant limit for collaborative projects	Drives efficiency through better use of resources, removes the need for each farm to have its own equipment; reduces industry debt; working at scale through cooperation; makes new markets more viable; and encourages maximising value from new equipment purchases.
RIS **Medium**	Offer business planning support to enable businesses to access and use grant funding available	De-risk investments through improved planning; increase accessibility to businesses without strong entrepreneurship or consultancy support.

RIS **Medium**	Broaden the scope of the grant scheme to include activities which (1) improve farm resilience, (2) align with Public Health objectives to deliver agroecological food in local food chains, (3) education outcomes or (4) cultural engagement.	Local stimulus to achieve behaviour change in market, enable delivery of agroecological food to local markets; support farm income diversification; support activities in the cultural repertoire; support development of entry routes into business and educational involvement.

CATEGORY / TIMEFRAME	ACTION BY PARTNERSHIP	RATIONALE
Policy and regulation **Medium**	Set up an inclusive institution to develop the local food system, e.g. the Jersey Food & Farming Foundation in policy RD3c	Conflicts in current agendas and values within existing institutions do not allow for development of the Rural Economy as a broader concept. An inclusive organisation which supplies essential services and infrastructure would support multiple initiatives without causing competition for resources within existing bodies. The Farming Foundation would also serve as a much needed point of call for non-governmental resources, events and support, and an incubator for small food system businesses. The Foundation could also have a scientific remit to pursue collaborations, attract research partnerships and support trials for the benefit of the local food system.
Skills and Education **Medium**	Deliver the Cultivate Programme to develop routes into business for young people.	Critical loss of staff, lack of replacement, few opportunities for young people combined with interest in diverse age groups evidences the need to improve the career offer in agriculture.

Skills and Education **Short**	Deliver REF policy RD1a: Apprenticeships	Apprenticeship programmes are essential to develop new entrants with dedication and passion. The success of the two existing apprenticeships available could be used as a model to develop the offer with more businesses.
Skills and Education **Short**	Document and share career pathways in agriculture.	There must be more information available about the types and requirements of agricultural jobs. Excellent career pathways information should clearly show the progression and qualifications available. Career pathways are essential to show where there is crossover with other industries which should help career changers enter the agriculture sector.
Skills and Education **Medium**	Connect to agricultural universities in the UK and EU for apprenticeships, internships and farm-based projects.	Partnering with agricultural universities for student exchange would foster a skilled workforce, drive technological advancement, and ensure continuous knowledge and cultural exchange. Off-island recruitment of committed students from these universities can address short term labour shortages, diversify the workforce, and introduce fresh perspectives, enhancing the resilience and competitiveness of the agricultural sector.
Skills and Education **Medium**	Develop and deliver modules for chef/cook training on low waste, seasonal, local, flexible food service.	Existing cooks and chefs may not have had much exposure to zero waste opportunities in the kitchen. Consider making this training available to home cooks as well as professionals.

New Entrants **Long**	Consider a first time growers incentive to help offset the financial barrier for new businesses	Analysis is needed to identify the most effective way to support new businesses from first time operators, who are essential to future food resilience. Barriers in accessing land and agricultural properties could be a target for strategies to reduce the costs for first time growers.
New Entrants **Short**	"How to set up an ag business"	Plentiful information is available on general business set up, but specific details for the ag and horticulture sector are lacking. There should be a consolidated source of information in an easily accessible place for potential new entrants. Potential founders value information about alternative business ownership models, sources of funding (inc. crowdfunding) and potential markets.
Business Development **Medium**	Develop smooth trade links to bioregional markets	Better trade links to European bioregional markets will diversify the supply of seasonal produce and improve access to EU resources for smaller and organic farm businesses. Smoother trade links to France will enable Jersey's participation in the regional market and add resilience to the addressable markets, and food supply overall.
Supply Chains **Medium**	Improve supply chain functionality: develop a digital or physical facility to manage indirect sales and improve communication between producers and wholesalers or retailers, in partnership with the Jersey Hospitality association	Island food resilience could be improved by coordinated action to improve local supply chains. Government could support the longevity and stability of the new service. Data flows are very poor and communication is strained. Solutions could be designed around a new role, a digital product, or a hybrid of both.

Business Development **Long**	The Farming in Protected Landscapes (FiPL) fund for R&D investment	The DEFRA FIPL fund, launched in 2021, offers capital outside the BAU farm subsidy and ELMS. It funds projects that support nature recovery, mitigate climate change, improve the landscape, or provide opportunities for people to enjoy and engage with the countryside. The scheme is not restricted to agribusinesses but includes other land managers and collaborations. Agri-innovation can also be funded through this mechanism.
Supply Chains **Long**	Develop a food processing and storage hub for the local supply chain.	Processing facilities add value to raw agricultural products, and storage facilities can minimise food waste by preserving perishable products for longer periods. The processing hub could enable development of small food industries based on existing or new crops as well as offering a collective distribution service.
Supply Chains **Medium**	Work with Parishes and landowners to develop new allotment sites close to urban centres	New allotments would address the overwhelming demand from urban residents. Increasing allotment space would directly stimulate people's growing efforts and, as a consequence, the market for educational events and courses for home-scale growing, as well as general interest in food.
Infrastructure **Medium**	Determine the feasibility and potential benefits of a kitchen equipment rental service, or food tool library	There is very limited kitchen equipment sharing and equipment hire on the island as existing business would rather sell their second hand stock in the UK to reduce competition locally. A tool bank or kitchen rental service could increase individual household resilience, support the development of new businesses, as well as increase the island-level production capacity.

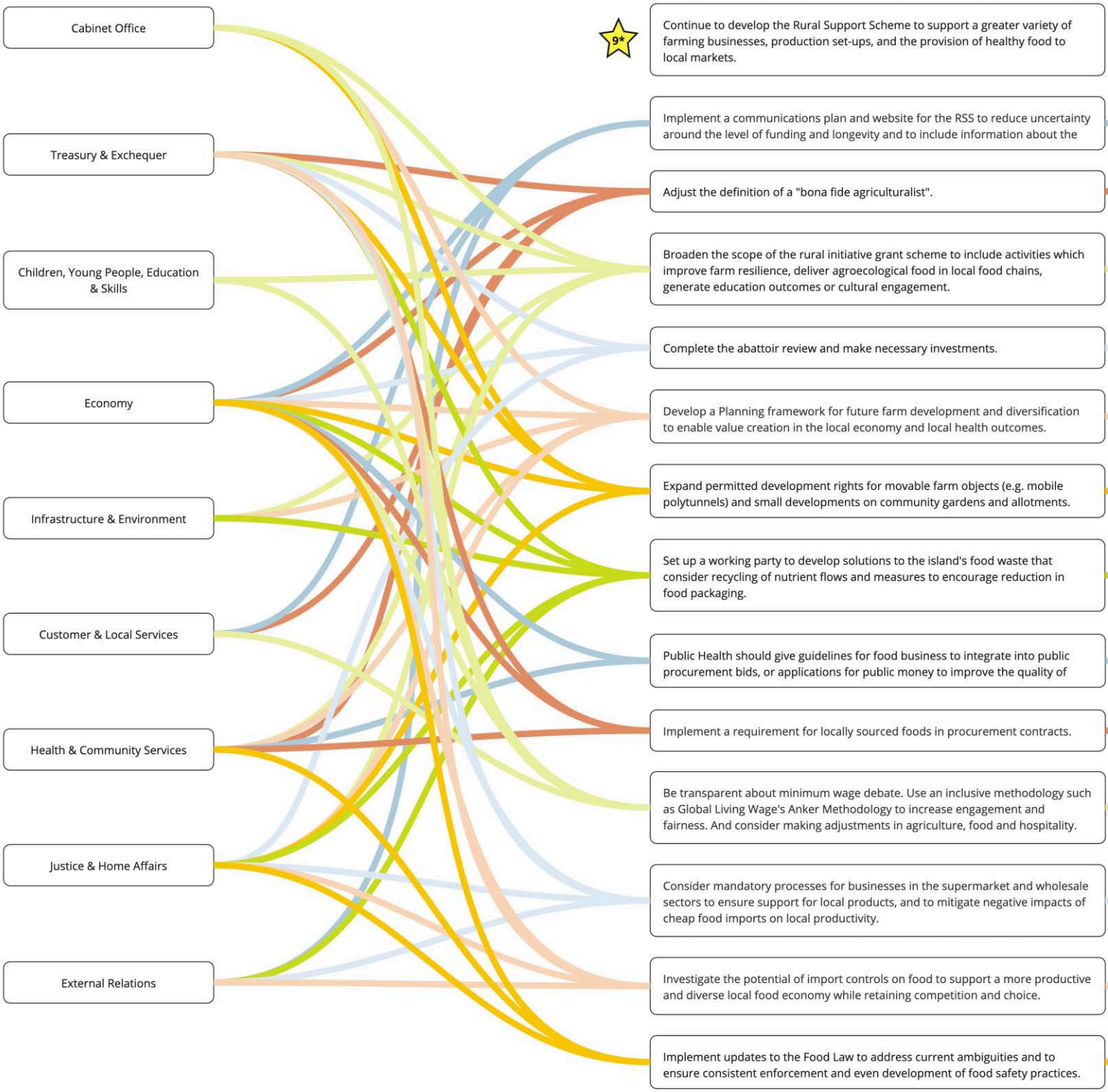
Infrastructure **Medium**	Coordinate the Jersey scientific community, including the environmental and medical domains to integrate food resilience as an overarching goal of future work.	Considering food resilience in biodiversity and cropland studies helps develop strategies to adapt to and mitigate the impacts of climate change, ensuring the viability of local agriculture. The hospital has a research arm that looks at preventative health care around cardio health and food. Key links between international agricultural research teams could be strengthened.
Infrastructure **Long**	Determine the feasibility and potential benefits of a land agency service.	New entrants have difficulty accessing land, and at the same time multiple non-conventional farmers reported having offers for fields but are unable to take them on at short notice. Better communication between land owners and potential renters or buyers would ensure opportunities to boost local food production are not lost, and would enable businesses to plan expansion on good data. A (periodic) land agency service could also help farms consolidate their land bank around their base of operations.
Supply chain **Short**	Consider forming a buying group for small scale inputs not supplied by the existing input providers.	Shared buying already happens on a small scale for essential inputs, this could be expanded informally or with light support (e.g. on import/export regulation) to increase affordable access to inputs not locally available.

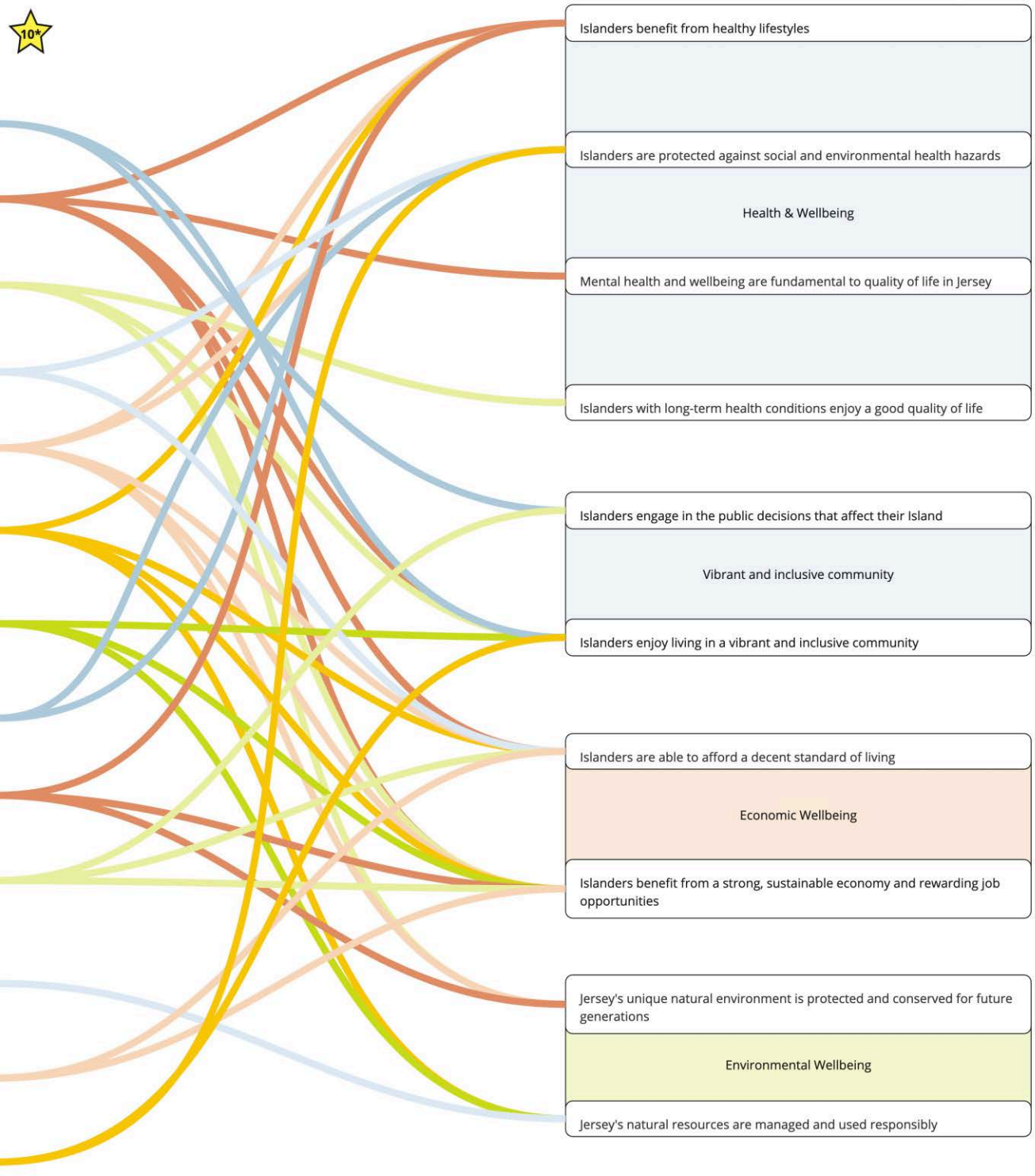
CATEGORY / TIMEFRAME	ACTION BY COMMUNITY	RATIONALE
Infrastructure **Medium**	Create a local network of suppliers (e.g. Liege Food Belt, Good Market) to support local sourcing. This information pack is essential to support new hires in making best use of local resources.	Without good access to information, businesses don't know what they can source locally which hinders market development. Scale is then harder to reach and contributes to price inflation.
Infrastructure **Medium**	Develop resources for community kitchen spaces based on need. Rentable kitchen spaces vary enormously in quality, the poorer setups could be improved to facilitate more community food events.	Production equipment and spaces are very capital intensive yet there are spaces island-wide which could be used for small and start-up businesses. New food businesses seeking commercial kitchen spaces would benefit from being able to search for and find suitable locations/equipment which can help reduce the initial investment.
Infrastructure **Medium**	Develop a network of food collection points to ease distribution to households.	Community gathering points could develop services such as a cold store to enable collection of food deliveries to make use of existing movements rather than adding a new transport service.
Corporate Levers **Medium**	Food retailers - continue to allocate resources for local buyers	Local buyers play a crucial role for supermarkets because they enable local procurement and cultivate trusted relationships with suppliers. Excellent local buyers who are passionate about food and have a hands-on approach are a powerful force for high quality local market development.

Corporate Levers **Medium**	Food retailers - develop mechanisms to reduce margin requirements on healthy local produce	Based on Public Health guidance, reduced margins on local produce could be implemented as part of healthy eating initiatives, or part of being a responsible island retailer.
Corporate Levers **Medium**	Local investment funds should consider the effect on the local food system of their assets in the food and beverage sector.	Investment funds with a Channel Islands portfolio must consider the impact of their strategies on local food security and resilience. Supporting the supermarket model of global food promotes profit extraction, undermines the local economy and erodes food resilience. Appropriate investments in the local food system are better choices when economic growth, jobs, and local prosperity are the guiding aims.
Corporate Levers **Medium**	Pursue business opportunities that deliver value across the local food system.	Examples tentatively identified include Jersey Beans, specialist food delivery, agroforestry, seaweed/mixed aquaculture inputs, zero-food waste circular business... and more!
Community **Medium**	Support the work of community food activism	There is an emergent food justice movement through Jersey Arts House.

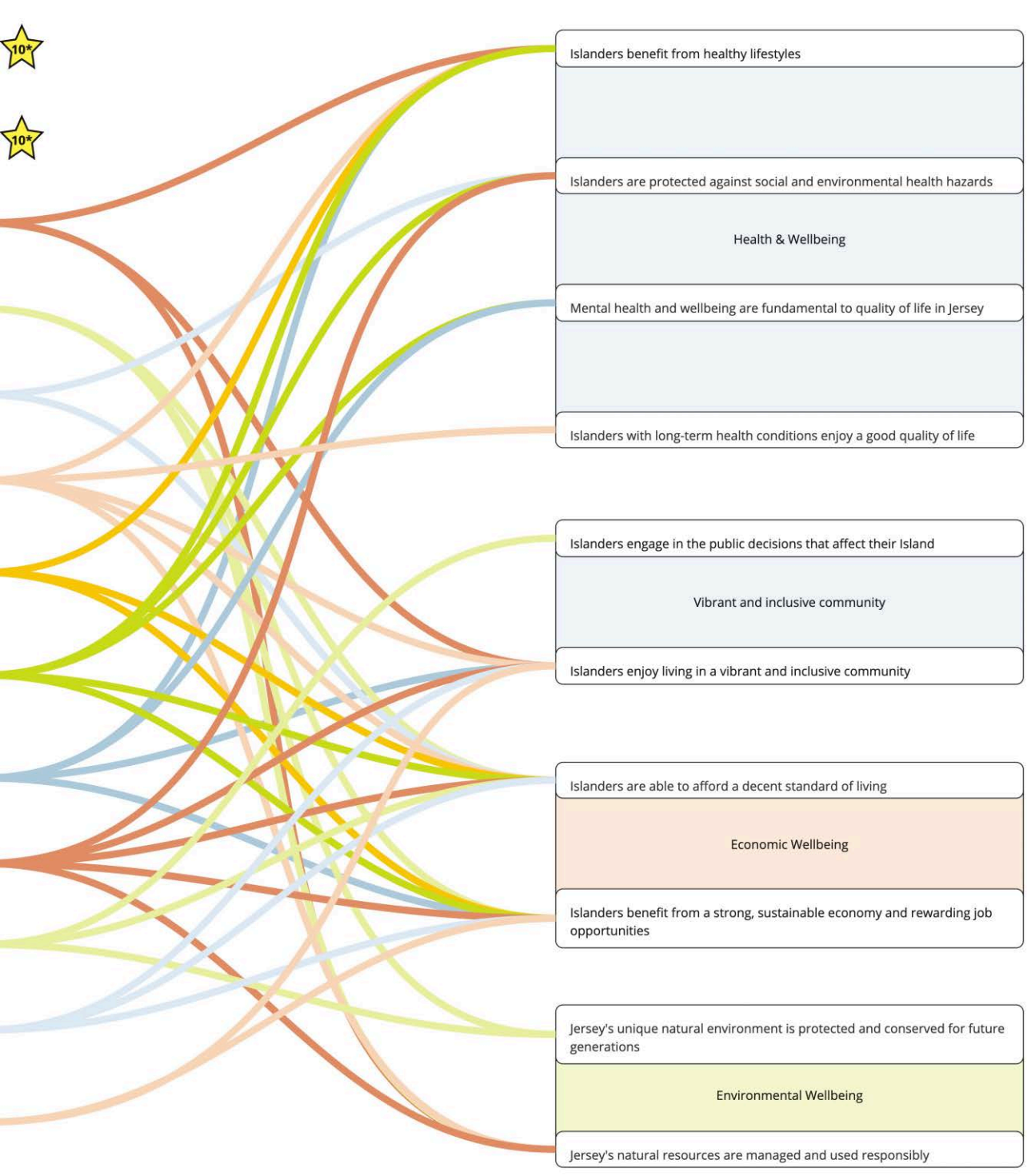
INTERCONNECTING DIAGRAM

Government Recommendations




10*
Islanders benefit from healthy lifestyles
Islanders are protected against social and environmental health hazards
Health & Wellbeing
Mental health and wellbeing are fundamental to quality of life in Jersey
Islanders with long-term health conditions enjoy a good quality of life
Islanders engage in the public decisions that affect their Island
Vibrant and inclusive community
Islanders enjoy living in a vibrant and inclusive community
Islanders are able to afford a decent standard of living
Economic Wellbeing
Islanders benefit from a strong, sustainable economy and rewarding job opportunities
Jersey's unique natural environment is protected and conserved for future generations
Environmental Wellbeing
Jersey's natural resources are managed and used responsibly

Government and Partner Organisation Recommendations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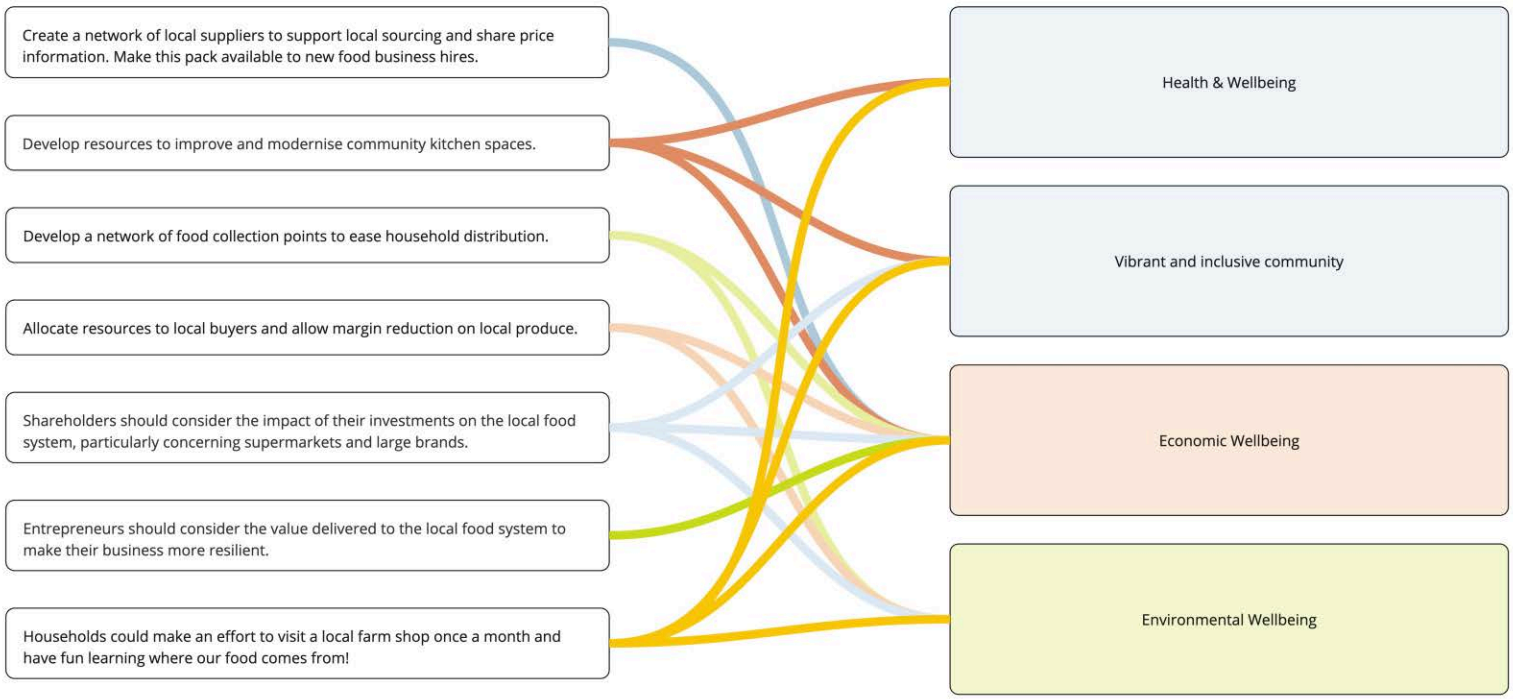
Community Recommendations



GLOSSARY

Adaptation

The response of a system to major environmental changes and/or political and economic shocks. This involves adjustments in processes, practices, or structures to mitigate negative impacts and exploit beneficial opportunities.

Agri-food

Pertaining to both agriculture and food, encompassing the entire food production and supply chain, from farming and harvesting to processing, distribution, and consumption.

Bio-regional

Bioregionalism is a philosophy that suggests that political, cultural, and economic systems are more sustainable and just if they are organised around naturally defined areas called bioregions, similar to eco-regions.

Commodity crops / cash crops / alternative crops

Commodity crops are produced primarily for sale rather than for personal consumption, often traded on a large scale. Cash crops are crops grown for direct sale in the market, typically providing income for the farmer. Alternative crops are crops that are not traditionally grown in a specific area or are grown as a diversification strategy to reduce risk.

Food justice

The pursuit of equitable access to food and fair distribution of resources and opportunities across all societal sectors, addressing social justice issues like food sovereignty, with a focus on the needs of marginalised communities.

Food resilience

The long-term capacity of a food system to absorb, recover from, and adapt to various disturbances or shocks while continuing to provide sufficient, appropriate, and accessible food.

Food security

The condition in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

GVA (Gross Value Added)

A measure of the value of goods and services produced in an area, industry, or sector of an economy. It represents the contribution to the economy by an individual producer, industry, or sector.

Panarchy

The nested systems of systems, emphasising the interconnected and adaptive nature of food systems across different scales and contexts.
A conceptual framework describing the interconnected and adaptive nature of complex systems across different scales and contexts, emphasising cycles of growth, accumulation, restructuring, and renewal.

Positive deviance

Positive deviance refers to the phenomenon where certain individuals or groups within a community manage to find novel solutions to problems or challenges that others face, despite having access to the same resources and facing similar constraints.

Productivity

The efficiency with which inputs (like labor, capital, and materials) are converted into outputs (goods and services)

Recovery

Return of a system to conditions that existed prior to a shock. The process by which a system returns to conditions that existed prior to a shock.

Regenerative / regeneration

Processes or practices that restore, renew, or revitalise their own sources of energy and materials, aiming for long-term sustainability and health of ecosystems.

Resistance

The ability of a system to block or minimise shocks, preventing negative consequences.

Risk

The likelihood and potential severity of a negative shock or event.

Socio-ecological System

A food system operates as a socio-ecological system, which involves complex interactions between human activities and ecological processes.

Sustainability

Meeting the needs of the present without compromising the ability to meet future needs.

Synthetic fertiliser

Man-made or chemically synthesised substances added to soil to supply nutrients necessary for plant growth.

Vulnerability

An undesirable interaction between risk and readiness that potentially produces negative outcomes.

APPENDIX

1. Daily Food Import

225 x 40’ refrigerated containers per day
Maximum tonnage: 35,000 tonnes
Assuming 50% of maximum capacity:
Daily tonnage = 25 * (0.5 * 35,000) = 437,500 tonnes
*350 (15 days without boats)
= 153,125 tonnes of fresh food and drink imported annually.

2. Supplementary Planning Key Recommendations

A list of key recommendations for supplementary planning regarding extended permitted development rights was provided in the report.

Acknowledgements. We would like to extend our sincere gratitude to the numerous experts who generously contributed their valuable insights and expertise to this report. Their dedication to sharing their knowledge and experiences has significantly enriched the content and accuracy of our findings. We appreciate the time and effort they invested in providing detailed information, answering questions, and offering thoughtful feedback. Their collective expertise has been instrumental in shaping the conclusions and recommendations presented in this report, and we are grateful for their collaboration.

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