

Increasing Fruit & Veg Production in Dumfries and Galloway

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Small Producers Pilot Fund Scoping Studies:
South of Scotland



PROPAGATE
RETHINKING LOCAL FOOD



Contents:

Executive Summary	2
Summary of Recommendations	3
Aims and Purpose of Study	5
Local Context	5
Current Production	6
Local Economy	7
National Context	8
Good Food Nation	8
Agriculture Act	8
Food Resilience	9
Data Collection	10
Survey	10
Focus Groups	11
Interviews	12
Visits	12
Key Issues	13
Land	13
Finance	14
Skills and Capacity	15
Routes to Market	17
Resources	18
Policy and Cultural Change	20
Recommendations	22
Land	22
Finance	22
Skills and Capacity	23
Routes to Market	23
Resources	24
Policy and Cultural Change	24
Concluding Thoughts	25
Appendix 1 Case Studies	26
Appendix 2 Example Cashflow	27
Appendix 3 Further Reading	28

Executive Summary

This Scoping Study forms part of the South of Scotland Small Producers project – scoping studies aimed at improving the position of smaller producers in local supply chains.

We urgently need to increase fruit and vegetable production, not just in Dumfries and Galloway but across Scotland. Our fragile supply chains combined with global challenges such as climate change, conflict and economic crisis put us in a vulnerable position – we import between 80-90% of all fruit and vegetables.

This study has set out to identify workable strategies, mechanisms and actions that can increase local food resilience by strengthening fruit and veg supply chains and supporting market garden Growers.

The study has engaged with Growers and stakeholders across the supply chain to gather information through surveys, focus groups, interviews and visits.

We have analysed findings, identified themes and drawn recommendations. The recommendations are summarised below.

Propagate has been working with Farmers and Growers since 2016. We have established projects such as the Regenerative Farming Network and the Galloway Food Hub, both of which involve working with small scale market gardeners and Growers.

In 2023 we produced Groundwork: A Market Gardeners Toolkit.

We deliver learning and education projects around sustainable food and farming. In delivering this project we have drawn on our experience and networks.

The work was been carried out between January and March 2025. A massive thanks to all the contributors and those who gave up their time to answer questions, think through problems and suggest solutions.

Summary of Recommendations

A set of recommendations have been produced through this work. These have been arranged under the different themes that emerged through outreach and engagement. They are produced in summary here, with more detail in sections below.

Land

Growers need access to good quality land and secure tenures.

1. **Increased visibility and capacity of the Dumfries and Galloway 'Share an Acre' campaign.**
2. **Engage with the Scottish Land Matching Service to identify areas for collaboration.**
3. **Making a clear case for sufficient acreage with examples and case studies.**
4. **Develop template agreements for various model arrangements and free, downloadable resources.**

Finance

Growers need capital funding to set up necessary infrastructure to establish their growing spaces, and revenue funding to support the difficult start up phase before produce is being sold.

1. **A small grant scheme should be available to Growers.**
2. **Support Universal Basic Income for Farmers.**

Skills and Capacity

To increase fruit and vegetable production in Dumfries and Galloway we need more skilled people and training in production horticulture, and more hands helping existing Growers.

1. **Develop a Local Food Production training programme.**
2. **Organise a CPD programme for Growers to develop skills.**

Routes to Market

Resilient enterprises have diverse income strategies – selling produce through a different systems and methods.

1. **Galloway Food Hub develops business to business arm of it's enterprise.**
2. **Collaboration between Growers to supply existing supply chain operators with scale and quantity needed.**
3. **Collaboration between Growers to take stalls at Producer and Farmers Markets.**
4. **Develop shared marketing such as a Grown in Galloway mark.**

Resources

Vital resources are needed to both set up and develop local fruit and veg production enterprises.

1. **Further explore developing a network of composting facilities on collaborating farms across the region.**
2. **Trial locally adapted seed production as a cooperative project between Growers.**
3. **Set up a machinery share circle for useful equipment for market gardeners.**

Policy and Cultural Change

Increase the uptake of healthier options and shifting diets will help resilient enterprises. Growers should be properly supported and recognised in farm payments schemes

1. **Involve Growers in developing outreach and learning programmes with schools and communities.**
2. **Lobby for proper support for Growers through future farm payments schemes.**

Aims and purpose of this study

This scoping study aimed to identify shared needs and barriers of vegetable producers in Dumfries and Galloway. We wanted to develop a common cause and collective vision, foster collaboration and ways that Growers could cooperate.

We also aimed to identify practical actions that could support and increase in capacity and production in the region. There is a recognised need to increase production to respond to demand from households, hospitality and retail, and potentially public sector food procurement.

Through shaping a shared vision, and developing a set of actions, we are creating a routemap for increasing vegetable production in Dumfries and Galloway.

Local Context

Dumfries and Galloway has an area of 2700miles², and a population of around 150,000. The largest town is Dumfries with a population of 33,600, followed by Stranraer with just over 10,000. All other towns and villages are scattered across the large rural area. Soil types and topography vary from sandy soils and lower coastal ground, to upland rocky hills, and area of peat bogs.

Fruit and vegetable production at scale is difficult, and making a living from it is harder. It's commonly agreed amongst market gardeners that 2 acres is the minimum for one person to make a living, which could provide food for around 50-60 households. But the margins are slim, the soil types challenging and the weather can be unforgiving.

Current veg production

Vegetable production is not a dominant feature of the farming landscape and culture in Dumfries and Galloway. The region is rich in dairy, beef and lamb production. Historically, Wigtownshire used to be a vegetable producing area, and certainly cropping and field scale vegetables were common in other areas. Agriculture subsidies pushed farmers towards livestock and dairy, and vegetable production became less visible from the 1960s onwards. Smaller holdings have become absorbed into larger holdings, and access to land for new entrants is difficult.

Outreach work carried out between 2020 and 2022 as part of the D&G Sustainable Food Partnership activities identified only 5 holdings producing vegetables at a market garden scale. However, most of these are small scale and rely on additional sources of income.

The Covid years increased demand from households for more local produce, and this boosted the visibility and viability of smaller market gardens.

The Dumfries and Galloway Buying Intentions report by Savour the Flavours (June 2020) showed that 41% of households were buying more local food and drink, and 84% said they would like to buy more local food and drink.

The establishment of the Galloway Food Hub in 2022 created a further route to market for local growers. The Food Hub started with just 3 vegetable producers, now 15 use the Hub to reach local customers.

There are now around 19 holdings in Dumfries and Galloway producing fruit and vegetables for local markets. Sadly the region has lost the largest producers, Barsolus near Stranraer – due to retirement at the end of the 2024 season. The remainder are mainly small scale, producing food for sale on areas from 200m² to 4 acres.

Growers are connected via a group - sharing knowledge and ideas via WhatsApp and email. There are occasional meetups and visits to each others holdings to see different systems.

All the vegetable producers in Dumfries and Galloway are using organic and agroecological methods, growing without the use of chemical fertilisers, pesticides and herbicides and in harmony with nature. One is organically certified.

Some use 'no dig' methods, while others are using some level of mechanisation to aid production. The majority raise seedlings themselves and most but not all have some degree of protected cropping such as a polytunnel.

Common crops produced for sale include salads, leafy greens, brassicas, peas and beans, courgettes and squashes, garlic, potatoes, tomatoes, chillies and aubergines.

Less common are field scale crops such as onions and carrots. This is mainly due to land availability and soil types.

Local Economy

There is consistent demand for local fruit and vegetables across Dumfries and Galloway. The D&G Sustainable Food Partnership invites citizens to sign up to support the Charter, and answer the question, *What change do you most want to see in Dumfries & Galloway's food system?* From 340 responses, 97% indicate a need for scaled up, increased and more widely available local food production.

Most Growers use the Soil Association Horticultural Price Data resource to set prices for their produce. This resource and pricing information is shared between Growers. Growers have various routes to market for their crops, with everyone using more than one avenue.

Diversifying outlets is seen as being a strategy for resilience.

Almost all Growers have additional off-farm work to supplement household income streams. Margins are slim on vegetables, and making a living is hard from just selling fresh produce – culturally, people are used to paying low prices for fruit and vegetables.

Producer Markets are seen as a good way to build visibility, but not a good use of time if the goal is to generate a profit.

“You need to harvest a lot to make your stall look good, but if it's not sold it's compost. It takes hours of harvesting – plus the stall fees so you end up not paying yourself for the time.”

Grower in workshop

Developing a relationship with a specific hospitality businesses or local shop is a safe route to market for some Growers. The most innovative cafes will take a mix of what is available or in season, or have a consistent ask that affords the Grower a reliable weekly outlet.

The Galloway Food Hub is regarded as the most reliable and flexible route to market for Growers, however as it's current fortnightly cycle can make it difficult to predict produce availability.

National Context

Good Food Nation

The Good Food Nation (Scotland) Act of 2022 provides the legislative framework that enables the government to take forward a vision for Scotland to be “a Good Food Nation, where people from every walk of life take pride and pleasure in, and benefit from, the food they produce, buy, cook, serve, and eat each day”.

The Act requires local authorities and health boards to produce Regional Food Plans, in line with the National Food Plan. The consultation for the National Food Plan concluded in April 2024, and the final Plan is expected later in 2025. At that point, Local Authorities and Health Boards will have a year to put their regional plans in place.

Publication of the National and Regional Plans are likely to have an impact on the local food economy, local food production, and community food issues.

In determining the content of its good food nation plan, a relevant authority must have regard to the scope for food-related issues to affect outcomes in relation to, among other things—

- (a) social and economic wellbeing,
- (b) the environment, including in particular in relation to—
 - (i) climate change, and
 - (ii) wildlife and the natural environment,
- (c) health and physical and mental wellbeing (including in particular through the provision of health and social care services),
- (d) economic development,
- (e) animal welfare,
- (f) education,
- (g) child poverty, and
- (h) any other matter specified by the Scottish Ministers.

Agriculture Act and Farm Payments

Agricultural payments are changing. New rules take effect from April 2025 – every farm holding claiming the Basic Payment Scheme will need to complete 2 out of 5 elements for a Whole Farm Plan.

Type of audit/plan	Who is it for?
Biodiversity audit	All farmers and crofters
Carbon audit	All farmers and crofters
Integrated pest management plan	Farmers and crofters that use pesticides and herbicides
Soil analysis	Farmers and crofters that claim Region 1 land and apply artificial fertilisers and/or organic manures to it
Animal health and welfare plan	Farmers and crofters that keep livestock

The area based threshold for receiving Basic Payment is over 3hectares. The majority of Growers in Dumfries and Galloway are not eligible since they are producing food on a much smaller area.

In 2023 the Scottish Government convened a steering group to co-create the criteria for the Small Producers Pilot Fund – aimed at improving small producers position in the supply chain. However, to date no fund has been released or funds made available.

The Fruit and Vegetable Aid Scheme Scotland provides £6million over the 2 years between 2023-25, and looks set to continue. However, this is only open to official recognised Producer Organisations (PO). A PO must have:

- at least 5 individual grower members all of whom are separate legal entities
- an annual turnover of €1 million marketable production
- a democratic structure that gives members an equal say in the PO's management and operation (giving one member, one vote)
- grower members of a PO must market 100% of their crops through the PO

These rules exclude smaller producers and market gardeners from receiving a share of the Scheme.

With the further evolution of Agricultural Payments there may be some future schemes open to smaller producers. However this is not confirmed, and when launched will be competitive.

Food Resilience

In February 2025 the National Preparedness Commission published Just In Case: 7 steps to narrow the UK civil food resilience gap. The report looked at how food choices and expectations have changed since the second world war. It considers what the impacts on civil society would be if the status quo were disrupted. How prepared would the the public be? We saw during Covid and Brexit how vulnerable our supply chains were. None of that

has changed – in fact, risks from climate change, resources shortages, conflict, economic crisis and political unrest are all higher now on the National Risk Register than they have ever been.

- In 2022, fruit and vegetable imports to the UK as a whole were valued at approximately £12.3 billion.
- The UK imports a significant portion of its fruit and vegetable consumption, with over 80% of fruit and almost half of vegetables coming from abroad.
- In Scotland that figure is likely to be higher, since we produce far less fruit and vegetables than in England.

Local food production and market gardens have the potential to increase local food resilience. A strong local economy, with cooperation between Growers and Consumers will be more resilient to shocks and supply chain disruption.

Data Collection

To gather data and information for this report we engaged different processes, including surveys, focus groups, interviews and visits.

Survey data

The Food and Drink Landscape Survey asked specific questions aimed at local food producers. Out of the 82 people who responded to the survey, 37 identified as Producers, and of them 14 were vegetable producers or market gardeners.

35% of Producers identified as a Sole Trader, 32% as a micro enterprise.

Challenges in distribution of produce were identified by Producers:

Limited access to distribution channels	30%
Limited market reach (local, regional, national, international)	30%
Challenges with packaging or shelf life	22%
High distribution costs	22%
Regulations or compliance issues	19%

The main challenges facing businesses access to investment and finance (39%), and pricing pressures (24%).

When asked about future ambitions, people said they would like increase the resilience of their enterprises by attracting more customers. There was a strong desire to focus on vegetable production as the core business.

“We want to establish ourselves in the community as a local food producer and increase our customer base”.

Survey Respondent

Producers also expressed a desire to be involved in educational initiatives and ‘farm to fork’ experiences. In further comments, they recognised the need for proper support for small producers from Government, and more joined up working and collaboration between Growers and Producers.

“Sustainability and Food Resilience Projects for the local supply of healthy food are going to become increasingly important. I would like to see a much greater emphasis on this inevitable need.”

Survey Respondent

Focus groups

We held group discussions at 2 different events in February and March:

09/02/25: Veg Producers breakout discussion: how can we increase fruit and veg production in Dumfries and Galloway?	10 Growers
20/03/25: Growing the Local Food Economy Dumfries and Galloway: breakout session on local food production	22 Participants

Attendees identified a range of different issues such as:

- Access to land – competition within property market, secure, long term leases and tenures (over 3 years). Many farmers are willing to share land but often not sufficient – at least 1 acre is needed to make a living.
- The need for protected cropping – polytunnels and polycrubs – along with other infrastructure.
- Business and marketing for smaller producers. Developing shared branding.
- Lack of time and capacity to grow and develop. Need additional hands – trainees, volunteers, seasonal workers.
- Funding: for start up infrastructure, basic income and trainee programmes.
- Policy change – small producers need to be better supported in upcoming Rural Support Plan and farm payments.
- Cooperation and collaboration between Growers eg collective crop planning and machinery rings.
- Training programme and skill sharing for Growers.
- Educational programmes to facilitate cultural and mindset shift around ‘good food’.

Interviews

In addition to the group discussions, we held 4 conversations with Growers and people involved in selling fresh produce.

Lucy Smithies, The Plant Farm

Amy McConchie, 1 Little Farm Shop

Beth Webb, Cree Valley Herbs

Kieran Paterson, Paterson's Fruit and Veg

Through these conversations people shared what they produced and sold, what they'd like to do more of, and what is stopping them.

A range of experiences of were shared, including access to land, rising costs, time and priorities, weather and finance. Retail businesses highlighted demand for and lack of availability of produce grown in the region.

Ideas were discussed to increase production, and explore how Growers could work together to support each other. Several proposals were put forward that could meaningfully support increasing production. These included:

- Skillshares and training programmes for existing Growers.
- Trainee programme for young people to learn market gardening.
- Developing local seed production, varieties suited to our climate and weather.
- Collective crop planning to meet specific supply chain demands
- Increasing range of value added produce – preserves etc... - this could also be collective.

Visits

Two in person visits were held to have a better look at growing 'in the field', and to discuss challenges and aspirations.

Loch Arthur Farm is a Camphill Community in Beeswing near Dumfries. The whole farm is 520 acres, and the market garden is 4 acres including substantial greenhouses and orchards.

The main purpose of the gardens is to produce food for the 80 residents of the community, and secondly to produce fresh fruit and veg for the farm shop. There is one head gardener, Lisa, and a daily team of volunteers to help with jobs - a mix of community residents and additional helpers. The market garden uses limited mechanisation, which is only possible with the extra hands. Weather, and finding suitable seeds suited to local conditions were highlighted as key issues.

Greenlaw Greens is a family run enterprise based at Mains of Greenlaw Farm just outside Castle Douglas. Greenlaw is mainly an arable farm producing barley straw for local

livestock businesses. They also provide 'bed and breakfast' to cattle over winter in the sheds.

Greenlaw diversified into veg production in 2022. The growing area covers around 2 acres each year and rotates around a much larger field growing an arable crop. Farmer Andy ploughs the new area and plants up with bought in seedlings. Some crops like carrots are sown direct. Produce is sold at the farm gate, and through the Galloway Food Hub. Andy used to have an arrangement with a cafe in Castle Douglas, but it's now closed. Distribution, marketing, labour and capacity were highlighted as the main challenges.

Key Issues

Throughout the exploratory work, cross cutting themes and threads have emerged as key challenges for Growers.

Land

Many Growers have experienced difficulty accessing land, some looking for many years before finding their site. Competition in the property market was a key concern – the rural average price of rural property has increased since 2020, with those marketed as 'equestrian' being valued particularly high, while often being ideal for the market gardener. Those who have managed to buy their own place either did so pre-2020, or have bought directly for a friendly farmer. In a minority of cases the land has been in the family for generations, or is community owned.

Other Growers have temporary arrangements with landowners and farmers. Arrangements vary but can be from a couple of years to 5 years. Many are at no cost in the start up years. However, despite these friendly terms, it is still difficult for a Grower to comfortably invest their time and money into somewhere that ultimately isn't theirs.

The amount of land on offer to a Grower can also radically vary. Most plots are under an acre. It is widely accepted in market gardening that you need at least an acre for cultivation to sustain an income for one person.

Furthermore, soil and land types in Dumfries and Galloway mean that the land available is often marginal – with better ground being reserved for silage and arable cropping.

A secondary issue related to access to land is housing provision. The recent Just Transition report for Dumfries and Galloway highlights the lack of adequate housing for people in the region, and the potential impact this has on economic opportunities.

Summary:

Market Gardeners need access to good quality land, sufficient acreage to make a living and provide food for local markets.

Leases should be long term, secure and affordable.

The rural housing crisis needs to be addressed.

Finance

All Growers highlighted financial barriers to developing their own enterprises, and for new market gardens. Setting up a new market garden comes with significant costs. Indicatively, these could be:

Capital Costs (start up)	Shed and covered work area	5000
	Hardstanding	1000
	Polytunnels	8000
	Electricity and water hook up	4000
	Tools	1000
	Mechanised tools	4000
	Fencing	2000
Subtotal		25000

The first year of a new market garden is critical for set up, and it’s often the case that income is not realised until later in the season, or into the second year of production. This combined with the slim margins on fresh produce, the pressure in the UK to drive down food prices means that recouping this expenditure is likely to be hard.

“The true cost of food includes enough to sustain farming businesses and provide a decent livelihood to farmers. However, pressure in the UK to drive down prices has led to precarious supply chains, unpredictable procurement and farmers whose health and well-being is negatively affected by their work.”

Sowing the Seeds of Stability, UBI for Farmers March 2024

As discussed above, there are currently no farm support schemes open to market gardeners and Growers. The only capital grant available, the Food Processing, Marketing and Cooperation scheme closed in 2022.

Basic Income for Farmers is a UK wide campaign that would see an unconditional payment for all farmers, enabling a just transition by supporting financial security. This would have a powerful impact on market gardeners, particularly in the start up phase and out of season months.

Summary:

We need small scale accessible and fair finance for market gardeners and Growers for capital and infrastructure costs.

We need support for Growers, particularly in the early stages of establishing their enterprise.

Skills and Capacity

Many Growers highlighted their capacity and time as barriers to increasing crop production. Producing a lot of food from a relatively small area is hard work and burnout is common amongst Growers.

Finding skilled labour to help can be a challenge – growing at Market Garden scale requires a different skillset to back garden or allotment growing. The additional cost of employing a seasonal worker will further reduce the tight margins.

Production horticulture is a formal term for market gardening. There is currently no production horticulture training in Dumfries and Galloway. SRUC Barony closed it's horticulture department around 2018. Threave Gardens runs ornamental horticulture programmes at RHS level 2. Despite efforts since 2020, it has not been possible to pilot or introduce any kind of food production or horticulture training at D&G College.

Volunteers and trainee placements could be a solution that would bring additional hands and help, and increase the number of people with appropriate skills and training.

Trainee placements are common in market gardens across the UK. They are sometimes paid, or come with accommodation and food. They are generally non-accredited learning opportunities and an entry point into market garden horticulture.

It is important that the trainee receives a high quality learning experience and good working conditions. This comes at a cost in terms of time and financial resources for the Grower, but the benefits of having a keen learner to share the workload can pay dividends.

Increasing skills amongst existing Growers through CPD and training opportunities can also help to grow capacity. In the focus groups and conversations, people identified various training topics that would be helpful. A training programme was suggested with different market gardens hosting different topics.

In 2023, the Landworkers' Alliance ran the Scotland Growers Training Network – a learning programme for current trainees on market gardens to visit other farms and develop their skills. However, these events were only delivered in the Central Belt. A similar South of Scotland programme could be developed.

“Meetups are useful, inspiring and motivating. We should keep having meetups a few times a year, with skillshares covering theory and practice”.

Lucy, The Plant Farm

Capacity can also be increased through mutual support and cooperation. In all conversations, Growers recognised the need to work together to boost visibility, increase customers and connect people to how food is produced.

Collaboration was identified as key to a resilient local food system. Various ways of embedding collaboration were suggested:

- Mentoring for new Growers. Offering support and advice either one-to-one or as a collective. This already happens informally through the WhatsApp group.
- Sharing land and workloads. New arrangements could be developed to work in partnership across a number of sites, either by dividing responsibilities or tackling big jobs together such as reskinning a polytunnel.
- Collective crop planning. This could be to meet certain customer orders and demands, avoiding over-production of certain crops and making sure there were sufficient quantities of higher demand crops.
- Cooperative sales and marketing. For example, sharing a stall between Growers at producer markets, or developing 'Grown in Galloway' branding to build consumer trust.
- Seed trials. Developing locally adapted varieties of different crops that thrive in our region.
- Sharing equipment and resources. For example, field scale machinery such as power harrow or rotavator.

Summary:

Capacity and skills are key issues that can be easily addressed with targeted resources, and will make a real impact on increasing production of fruit and vegetables.

Routes to Market

Crucial to making a living as a Grower are secure and reliable routes to market.

Fruit and vegetable production is an intensive process and hard work. Not all Growers are good at marketing and communicating with potential trading partners, or have the time needed for this important work.

The Galloway Food Hub provides a good outlet for Growers as it reached over 100 people on each 'order cycle' (the window customers have to order). According to Food Hub data, Salads crops are popular with customers, along with potatoes, carrots and onions.

The Food Hub also enables the Grower to focus on producing crops and worrying less about marketing and promotion. Collective solutions work.

However the Food Hub currently only trades fortnightly, making it difficult for Growers to plan ahead and needing alternative outlets for their produce on the other weeks. The Food Hub uses Open Food Network as an online platform – so Growers could maintain their own shop in the 'off' weeks – however customers footfall would lack continuity.

The size of the region and the dispersed population presents an issue for Growers. The lack of urban centres means that distribution of fresh produce may need to be carried out over a wide area. This further increases costs through transport. This problem is also partly solved through collective action such as the Food Hub.

“Firstly we sell micro-local to Auchencairn – we sell to the village shop and Balcary Bay Hotel. Outwith Auchencairn we sell to other cafes shops and restaurants, and then we sell through the Galloway Food Hub, and we’ve got our own Open Food Network shop.”

Naomi, Suie Fields

Developing relationships with local shops and hospitality businesses can bring in secure income. In the South of Scotland Food and Drink Landscape Survey, 72% of food businesses said they had challenges sourcing local produce, demonstrating clear demand

from the sector. Most cited delivery challenges, availability, seasonality and price as barriers to accessing more local produce.

The uncertain economic climate has seen many hospitality businesses close over the last year. Additionally, wholesale prices are typically lower than direct-to-household, further reducing income.

Other options for the Grower are setting up their own box or Community Supported Agriculture (CSA) scheme, or selling via farmers and producer markets.

In a CSA model, Members (subscribers) commit to a seasonal or yearly subscription with a local farm, paying an upfront fee or instalments. This financial support helps the farm cover operational costs and mitigates the risks associated with agriculture. Members receive regular shares of the farm's harvest throughout the growing season, typically weekly or bi-weekly. This direct connection promotes transparency, trust, and a sense of community as members get to understand where their food comes from and how it's produced.

However, running your own CSA is hard work as it is the Grower therefore has obligations to fulfill, and finding enough members requires significant promotion and communications.

Unexpected weather conditions and climate change are affecting growing seasons and the success of different crops varies hugely from one year to the next. For example, 2024 was a particularly bad year for courgettes and squashes.

Whether selling direct-to-household, to shops, at markets or to hospitality businesses, a diverse range of crops will help increase resilience.

Summary:

Deploying a range of retail options can offer security, however this takes time and skills to navigate.

Collective approaches such as the Galloway Food Hub can be effective.

There is a demonstrated demand from hospitality businesses for more local produce.

Resources

Growers highlighted a number of essential resources that are in short supply in the region – and would help to increase production capacity both on existing holdings and for new Growers.

Organic, agroecological and no-dig systems require large quantities of compost and high quality organic matter. Nearly all Growers discussed the need to build healthy soil function and nurture soil micro-organisms.

Cattle manure from winter housing is often available from friendly farmers but this is rarely 'well-rotted' and not often organic. Horse manure can be readily available but collecting sufficient amounts is laborious and time consuming work.

Creating enough organic matter onsite is a goal of many. This requires the Grower to have a large scale system and enough materials to break down and compost. A large amount of material creates a relatively small amount of ready compost.

Dumfries and Galloway Council have recently started a household greenwaste collection scheme which potentially will be collecting many hundreds of tonnes of plant materials. However, this is being collected by a contractor and leaving the area, destined for a massive composting facility in Blantyre, Lanarkshire.

Developing a network of large, on farm composting facilities serving the needs of local communities and market gardeners alike could be a solution.

"We underestimated the sheer amount of compost that was needed initially to build the beds. We were very thankful that David allowed us to use some compost from the farm, however this wasn't fully decomposed enough, so we did not have the optimal conditions for growing in."

Carol, Wholesome Fields

Locally adapted seeds for resilient varieties were flagged as a missing resource. Many of the seeds available on the market are produced in warmer, Southern regions with different climate and weather conditions. For example, Tamar Organics – a popular supplier of seeds for market gardeners – are based in Cornwall. Real Seeds are based in Wales.

Some Growers are undertaking their own crop trials to see what works and develop locally adapted varieties. This would help with resilience against challenging and unexpected weather. Seed saving and breeding is a common activity for Growers. Working collaboratively, Growers could develop local varieties and trade amongst each other – or further afield.

"We need more seed adapted to Galloway. Climate change is here and we need crops up for the challenge. Another season like last year could easily put a small grower out of business."

Beth, Cree Valley Herbs

Certain types of equipment can be useful for the market gardener, especially if growing on over an acre. The following are helpful at different times of the year:

- Two-wheeled tractors
- Power Harrow
- Auto-seeders
- Auto-weeders
- Seedbed rollers

The cost outlay involved in each Grower purchasing their own equipment can exceed £10,000. Growers who are geographically close to each other could form micro-machinery rings, sharing the purchasing cost and use equipment as needed.

Summary:

Growers need vital resources in order to establish and develop their enterprises.

Collaborative approaches could be adopted to meet these needs, such as composting schemes, local seed production and equipment sharing.

Policy and Cultural Change

The final strand identified by Growers as essential to a successful business is cultural and mindset shifts, and policy change.

Growers struggled with being taken seriously as farmers and food producers. Gardening is seen as some 'nice to do', and despite a well managed 1-2 acres being able to feed 30-100 people, market gardening is not regarded by many as 'real' farming.

There is a perceived high cost of food, but in the UK we still pay the lowest prices in Europe – especially for fresh fruit and veg. In 2020, the prices for fruit and vegetables in the UK were 89.8% of the EU average.

The Scottish population is not known as high fresh produce consumers. According to the Scottish Government Diet and Healthy Weight Report, *22% of adults in Scotland eat 5 or more portions of fruit and veg a day. Adults eat an average of 3.3 portions of fruit and vegetables on a typical day.* Despite multiple policy and public health interventions, this figure has not changed much in 20 years. This has led to diet related problems such as obesity, diabetes etc...

“Not enough people eat fruit and veg especially kale! More food and nutrition education needed.”

Lucy, The Plant Farm

Dumfries and Galloway Sustainable Food Partnership is a cross sector, multi stakeholder approach to co-creating healthier, more resilient and fairer food systems in the region. The Partnership was formed in 2020. It has consistently identified food education and learning as key actions for increasing the uptake of healthier produce, reducing diet related ill health. This work can simultaneously support the uptake of locally produced food.

Growers were keen to be involved in local educational projects that could connect people to where their food comes from and facilitate a better understanding of the benefits of market gardening.

As has been described further above, our current farm payments and policies are not set up to support local veg production. Growers identified a need for some sort of financial support, both in terms of revenue and capital. Enabling agroecological production should be seen as a public good that also brings benefits to soil health and biodiversity. For Growers who don't have their own land, there could be an incentive for landowners to host market gardens. This could include capital grants for necessary infrastructure eg fencing and electricity.

Summary:

A mindset shift is needed along with farmer led education programmes to support an increased uptake of healthy and local produce.

More support is needed for local fruit and vegetable producers who are providing public goods to their communities.

Recommendations

Based on the findings from surveys and discussion, and the analysis of the themes and threads above, we are able to draw a number of recommendations.

Land

Growers need access to good quality land and secure tenures.

5. **Increased visibility and capacity of the Dumfries and Galloway 'Share an Acre' campaign** - connecting landowners to Growers. The Regenerative Farming Network has around 300 members across the region and an active facebook group. Additional resources could enable a focused campaign and outreach.
6. **Engage with the Scottish Land Matching Service to identify areas for collaboration.** The SLMS provides a service linking up farmers of all types to facilitate Farm Partnerships and Farm Sharing. SLMS is coordinated by National Farmers Union Scotland.
7. **Making a clear case for sufficient acreage with examples and case studies.** Model business studies based on different scenarios based on real life experiences of Growers in the region.
8. **Develop template agreements for various model arrangements and free, downloadable resources.** Provide a range of resources and a 'how to' template will give Growers and landowners confidence when entering into new arrangements.

Finance

Growers need capital funding to set up necessary infrastructure to establish their growing spaces, and revenue funding to support the difficult start up phase before produce is being sold.

1. **A small grant scheme should be available to Growers.** Whether this is for start up or business development, a small grant scheme will enable Growers to get what they need in place to run a thriving and resilient enterprise. This could be administered by SOSE, or through a partner organisation.
2. **Support Universal Basic Income for Farmers.** UBI4Farmers will enable a Just Transition for all farmers to develop sustainable and resilience businesses.

Skills and Capacity

To increase fruit and vegetable production in Dumfries and Galloway we need more skilled people and training in production horticulture, and more hands helping existing Growers.

1. **Develop a Local Food Production training programme.** Aimed at young people and new entrants, this could be delivered as a training cohort with placements across several market gardens.
Theory and personal development sessions for example business skills and marketing would be delivered as a group. Experience in supply chains and secondary production could be added with placements in food manufacturing businesses and the Galloway Food Hub. A qualification could be included. This would solve the problem of 'extra hands' and skills simultaneously.
2. **Organise a CPD programme for Growers to develop skills.** A monthly workshop hosted on an existing market garden would support skills development in a range of topics. Growers identified themes of interest in workshops and discussions, which included:
 - Cover crops and green manures
 - Composting and bio-fertilisers
 - Crop Planning
 - Scything
 - Business and funding
 - Tools and machinery
 - Water harvesting

Routes to Market

Resilient enterprises have diverse income strategies – selling produce through a different systems and methods.

1. **Galloway Food Hub develops business to business arm of it's enterprise.** A B2B wholesale service will allow Growers to easily access local businesses who have a commitment to good food.
2. **Collaboration between Growers to supply existing supply chain operators with scale and quantity needed.** Aligning growing plans and working together to produce specific crops such as courgettes and kale would open up possibilities to supply through operators such as Patersons Fruit and Veg.

3. **Collaboration between Growers to take stalls at Producer and Farmers Markets.** This would reduce the risk of produce wastage and spread the responsibility between Growers while still promoting local food and reaching customers.
4. **Develop shared marketing such as a Grown in Galloway mark.** Working together increases visibility and engagement with customers. A map with Growers would help customers to know where and how they can access local fresh produce.

Resources

Vital resources are needed to both set up and develop local fruit and veg production enterprises.

1. **Further explore developing a network of composting facilities on collaborating farms across the region.** Schemes that can take both green waste and food waste, and are managed effectively would produce multiple co-benefits including Net Zero and carbon sequestration.
2. **Trial locally adapted seed production as a cooperative project between Growers.** Working together, select specific varieties of crops to trial growing and breeding on market gardens across the region. Over time, hardier varieties will adapt and thrive.
3. **Set up a machinery share circle for useful equipment for market gardeners.** Capital investment would be required and a system worked out to manage this, but a resource of useful equipment would help to maximise productivity.

Policy and Cultural Change

Increase the uptake of healthier options and shifting diets will help resilient enterprises. Growers should be properly supported and recognised in farm payments schemes

1. **Involve Growers in developing outreach and learning programmes with schools and communities.** Host on farm visits and activities that enable people to grow a connection to how food is produced and try new things. Growers should be involved in delivering programmes and recognised for their contributions.
2. **Lobby for proper support for Growers through future farm payments schemes.** A fruit and vegetable support scheme should fairly benefit Growers of all sizes who are making a living from selling produce.

Concluding Thoughts

This project has engaged Growers, food businesses and supply chain operators to establish actions and strategies for increasing fruit and vegetable production in Dumfries and Galloway.

This is a large region with a dispersed population. Production of fruit and vegetables is not the dominant farming system, so carving out smaller scale market gardens goes somewhat against the grain. However, in the not too distant past every town and village would have had market gardens producing food for their communities.

A small but determined number of Growers are persevering. Most are motivated by the need to grow, the recognition and understanding that our global supply chains are fragile, that we need local resilience. Growers feel the need to feed their communities. None are motivated by money although all need to make a living.

Growers across the region are already working cooperatively, sharing and skills and finding ways to support each other. With the right resources, land and skills, production can be increased and more Growers will be inspired and encouraged.

The recommendations do not at this time have organisations or leads to take them forward. That is quite deliberate – these can be used to generate an action plan, or adopted by one of more organisations work collaboratively.

Key to success will be collaboration. No single organisation, Grower or policy mechanism is going to fix this. But by working together, we can increase fruit and vegetable production in Dumfries and Galloway.

Case Studies

Plant Farm

Lucy Smithies and Sam Winter co-run The Plant Farm, near Whithorn on the Machars.

They have roughly 5 acres, currently producing food over around an acre and slowly expanding. They use permaculture, no-dig and agroecological systems. They have polytunnels, orchards and permanent veg beds.

They sell produce at the Farm Gate, direct to local cafes and restaurants, and via the Galloway Food Hub.

[Read more about The Plant Farm here](#)

Salad Brew

Salad Brew is based near Borgue and is run by Anne Bannatyne and Rod Slater.

Their aim is to produce affordable, quality, fresh veg for local people in a sustainable way. They grow a wide range of crops organically, with a particular focus on tomatoes and other greenhouse crops produced hydroponically in their Kedarhouse.

They sell direct to customers and cafes in the Kirkcudbright area, and also supply households across the region via the Galloway Food Hub.

[Read more about Salad Brew here](#)

Hidden Veg

Nestled in the Galloway Hills near Balmaclellan, Hidden Veg is run by Abi Mordin with support from partner Bruce Luckhurst.

They grow across around half an acre, with some additional polytunnels for indoor crops. Food is produced using permaculture and agroecology, with no-dig beds and soil at the heart of the system. They have hosted young people on placements to learn about production horticulture.

Hidden Veg sells at the farm gate and via the Galloway Food Hub.

[Read more about Hidden Veg here](#)

Example Market Garden Cashflow

Year 1

Income		Subtotal	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Sales	Weekly veg sales	9200		500	500	800	1000	2000	1500	800	500	500	500	600
	Plug Plants	600		200	200									200
	Cut flowers	600				200	200	200						
	Workshop fees	9000	3000			3000			3000					
Subtotal		19400												
Other	Donations	240	20	20	20	20	20	20	20	20	20	20	20	20
	Grants	20000		15000								10000		
	Loans	5000	5000											
Subtotal		25240												
Total		44640												
Expenditure		Subtotal	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Operational Costs	Staff Costs	14400	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
	Volunteer Expenses	880	100	100	100	100	100	100	100	20	20	20	20	100
	Transport	252	23	23	23	23	23	23	23	15	15	15	23	23
	Resources and equipment	620			20						600			
	Office costs	120	10	10	10	10	10	10	10	10	10	10	10	10
	Loan Repayment	5148	429	429	429	429	429	429	429	429	429	429	429	429
	Accountancy	200							200					
	Insurance	500	500											
Subtotal		22120	2262	1762	1782	1762	1762	1762	1962	1674	2274	1674	1682	1762
Capital Costs (start up)	Shed and covered area	5000												
	Hardstanding	1000												
	Polytunnels	8000												
	Electric and water	4000												
	Tools	1000												
	Mechanised tools	4000												
	Fencing	2000												
Subtotal		25000												
Total		47120												
Cashflow		-2480												

Year 2

Income		Subtotal	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Sales	Weekly veg sales	17200	800	800	1000	2000	2500	3000	2000	1500	1000	800	800	1000
	Plug Plants	800	200	200	200									200
	Cut flowers	600				200	200	200						
	Workshop fees	9000	3000			3000			3000					
Subtotal		27600												
Other	Donations	240	20	20	20	20	20	20	20	20	20	20	20	20
	Grants	7500		2500								5000		
Subtotal		7740												
Total		35340												
Expenditure		Subtotal	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Operational Costs	Staff Costs	18000	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	Volunteer Expenses	880	100	100	100	100	100	100	100	20	20	20	20	100
	Transport	252	23	23	23	23	23	23	23	15	15	15	23	23
	Resources and equipment	520			20						500			
	Office costs	240	20	20	20	20	20	20	20	20	20	20	20	20
	Events and Activities	1200	400			400			400					
	Accountancy	200							200					
	Insurance	500	500											
Total		21792												
Cashflow		13548												

Further Reading

<https://www.soilassociation.org/farmers-growers/market-information/price-data/horticultural-produce-price-data/>

<https://www.dgsustainablefoodpartnership.org/get-involved>

<https://nationalpreparednesscommission.uk/publications/just-in-case-7-steps-to-narrow-the-uk-civil-food-resilience-gap/>

<https://www.statista.com/topics/8369/fruit-and-vegetables-in-the-uk/#editorsPicks>

<https://www.justtransition.scot/publication/a-just-transition-for-dumfries-and-galloway/>

<https://www.ruralpayments.org/topics/all-schemes/food-processing--marketing-and-co-operation/>

https://autonomy.work/wp-content/uploads/2024/03/FarmersUBI_press.pdf

<https://communitysupportedagriculture.org.uk/what-is-a-csa/>

<https://landworkersalliance.org.uk/agroecological-pathways-horticulture-2/>

<https://landworkersalliance.org.uk/scotland-growers-training-network/>

<https://www.cbi.eu/market-information/fresh-fruit-vegetables/united-kingdom/market-potential>

<https://www.nutritionscotland.org/resources/scottish-eatwell-guide/>

<https://www.dgsustainablefoodpartnership.org/>

<https://slms.scot/>

<https://www.nts.org.uk/visit/places/threave-garden/threave-school-of-heritage-gardening>