



The economics of horticultural CSA farms in the UK

Index

Introduction	4
Executive Summary.....	5
Methodology.....	7
What every CSA farm needs: access to key resources	8
The key resources of our eight CSA farms	8
What we found out about CSA use of and access to key resources	8
Customer numbers	8
Staff numbers.....	9
Land area.....	9
Capital equipment.....	10
Working capital	10
Grant support.....	10
What does this mean for the development of community supported agriculture?	11
Pointers on key resources for CSA farm businesses:.....	11
Pointers on key resources for the CSA Network UK and policy makers wanting to see more CSA farms in UK:.....	11
Business benchmarks for our eight CSA farms	13
What we found out about business benchmarks for CSAs	14
Shares per hectare	14
Value of each CSA share of the produce	14
Produce value per hectare.....	15
Shares per staff member	15
Produce self-sufficiency	15
Length of supply season.....	15
What does this mean for CSA development?.....	17
What every CSA farmer worries about: financial performance	18
Financial performance of our eight CSA farms	19
Gross margin	19
Gross Value Added (GVA)	19
Surplus before grants.....	19
Customer churn	20
Cashflow recovery date	20
What does this mean for CSA development?.....	20

Interventions by organisations wanting to see more CSAs farms in UK:	21
How CSA farms grow and thrive: success indicators	22
Success indicators for our eight CSA farms	22
What we found out about CSAs success indicators	22
Full cost convergence.....	22
Capital replacement ratio	23
Capital replacement actual	23
Staff pay rate per hour	23
What does this mean for CSA development?	24
Pointers on business success indicators for CSA farm businesses:	24
Pointers on business success indicators for organisations wanting to see more CSAs farms in UK:	24
The biggest economic barrier to CSA development: the benefits delivered are not getting paid for	26
Recommendations to help CSA businesses grow and thrive across the UK	30
Actions within and between farm businesses:	30
Actions within and between support organisations, policy makers and funders:	30

Introduction

Community Supported Agriculture (CSA) is a brilliant model – good for people, good for planet and good for producer. That’s what we’ve always said, but we wanted to test our assumptions...

We know CSAs can work – plenty of our network members demonstrate this brilliantly, but we also know some CSAs are struggling and we don’t know exactly why. We have some data on the environmental and social benefits but there is no published economic performance data UK CSAs: at least not until now. Our aim is to help understand how CSA is working as a business in the UK and provide some model financial statistics and benchmarks for new and existing CSAs to help them thrive, grow and replicate. Our analysis concentrates on horticultural CSAs. In the future we hope to be able to carry out similar work on livestock, fuel, flower, herb and other types of CSA.

Horticultural CSAs share many farming techniques with market gardens, but the relationships with and between farmer and customer (or ‘member’ as they are known in community supported agriculture) are intrinsic to CSA and very different. They are relationships based on trust, mutual understanding and support and appear to yield high returns in terms of resilience. Perhaps because of this, CSA is increasingly being seen as a suitable business model for secure food supply and part of the low-carbon business transition for farms.

In order to help existing farmers and new entrant farmers decide if CSA is for them, we need detailed data on how it works, what to expect, financial pitfalls to avoid and indicators of success. A few folk from CSAs kindly gave their time to think about what we needed – and we give thanks to Gareth Davies, Ruth Evans and Jo Hunt for this.

Jo, economist turned farmer crunched the figures, analysed the data and pulled out conclusions from the eight CSAs that generously shared their economic figures to help us better understand overall performance. These farms are:

- Big Meadow CSA
- Cae Tan CSA
- Chagfood
- Five Acre CSA
- GO Local Food
- Knockfarrel Produce
- Plotgate Community Farm
- Teign Greens

We hope the results help existing and future CSA businesses to grow and thrive. There is more work to be done to understand the mechanisms which support a successful CSA, but this research gives some indicators to help you see where you are flourishing and where there might be room for improvement.

CSA Network UK
September 2024

Executive Summary

We have gathered data on the economics of CSA farms operating in the UK for the first time. The data reveals a group of innovative small farms across the UK that are making a long-lasting business out of growing a wide range of healthy fresh food for local households who are willing to commit to a weekly 'share' of farm produce.

Based on the data we gathered, a typical UK horticultural CSA looks like this:

- *Four hectares of productive land*
- *120 subscribers (customers)*
- *2.3 full-time equivalent (FTE) staff – usually a lead grower, + two or three part-time staff*
- *£11,000 of farm equipment*
- *It takes one full-time worker to produce 50 “shares” (a “share” is the produce received by one household in a year)*
- *One hectare of production land produces 30 shares*
- *Subscribers receive shares for 46 weeks of the year*
- *90% of everything supplied to subscribers (by value) is grown on the farm*
- *A gross margin of 40%*
- *Spends four times as much on labour use as capital use*
- *Take three to five years to break even*
- *Pays the national minimum wage to staff*
- *Needs only a very small overdraft for three months in spring*

How the CSA business model differs from most UK farms:

CSA are small farms with a distinctive business model that include several unusual features giving longevity and resilience. CSAs are distinctly different to most UK farms in the following positive ways:

- Very efficient small land unit operating within a larger farm or on own land
- Super-productive land use averaging £8,000 (and up to £18,000) worth of food per hectare
- Huge diversity of crops grown, spreading climate risks but requiring more skills and kit
- Complete short supply chain capturing all the value but taking on more roles and tasks
- Low capital investment lowering the barrier to entry but holding back growth and pay rates
- Feeding local households with a fresh, healthy diet, year-round and direct from the farm
- Customer commitment with members subscribing for a year's supply and paying at least a month ahead
- Customer loyalty where households stay as a regular customer for seven years, as well as further involvement through volunteering for farm tasks and/or providing 'soft' loans

In other ways, CSA farm businesses are just like most smaller UK farms and face the same financial and resource pressures, in more negative ways:

- Very labour intensive creating interesting rural jobs, but with low wage rates and a reliance on personal 'commitment' that can lead to burnout
- Covering all costs but unable to pay for new investment making it difficult to grow in size and increase staff productivity and pay
- Struggling to train staff and new entrants and having to do this themselves with no pipeline to transfer the complex skill set involved in running a CSA to new entrants and employees
- Making no financial return on investment. Investment in CSA is not producing a financial return, instead it is producing a large social return on investment, but as this is not paid for, CSA is currently personally rewarding but not financially rewarding

The positives clearly outweigh the negatives for all existing CSA farms, and this is attracting some communities and farmers to look at adopting CSA. However, the lack of financial incentives and the hostile food environment is holding back the wider adoption of this unusual, efficient and productive business model. If we want to encourage CSA, and more generally food that is good for all, we urgently need to change the ability of our farmers to thrive in what is an increasingly difficult, supermarket dominated and globally unsustainable food environment.

We offer four suggestions for how this could be done:

1. **Correct the market failure:** legislate to cover the full costs of food supply chain – emission, pollution, air freight, health costs – and set a *true* price.
2. **Create a protected market for good healthy food:** to stimulate more local food production, the government creates a protected market, as exists for renewable energy.
3. **Pay for the public goods that are not priced by the market:** reward farmers for delivering public goods by paying them for the social outputs they deliver.
4. **Subsidise production of sustainable food:** subsidise the costs of production for farms that deliver public goods.

Adopting one or more of these would ensure the success of CSAs and safeguard our food supply and planet for future generations.

Methodology

We carried out a detailed assessment of the economic performance of eight UK CSA farm businesses. For each farm we measured:

- Profit and loss accounts for years one, two, three, five and 10 of business operation
- The resources used to run the farm in each of these years
- Outputs from the farm

After collecting all the data and carrying out an initial analysis, we ran two feedback workshops - one in Scotland and one in England - attended by a range of more than 40 CSA farm businesses. This provided a sounding board to check the validity of the results and to gather feedback. We used this to develop a list of practical actions for CSA farms and support organisations to help them grow into stable businesses. ,

Our analysis is grouped into four areas of CSA economic resilience:

- **access to key resources**
- **business benchmarks**
- **financial performance**
- **success indicators**

A corresponding section details the subset of more detailed indicators for each, presents our data and makes recommendations. Verbal feedback from the wider set of 40 CSA businesses is presented in italics.

We also chose to look at how CSA businesses evolve and grow over time, from start-up in year one, through to year 10. Like most businesses, they experience significant change as they grow and develop. We observed a development model for CSA businesses in the UK, with four distinct stages:

- Start – first two years of operation: new site, new people, rapid establishment, lots to learn
- Survive – years three to five: expansion, more staff, keeping going, adapting to what works
- Thrive – years five+: if you get this far you are doing it right, and can develop additional products or services, widen customer base and increase investment
- Replicate – years five+: CSA farms tend not to grow into big businesses. Once well established they often act as training sites for new producers, as well as as external mentors for farmers to help them develop a new CSA business. This route to replication is the main driver of the growth of community supported agriculture in the UK

What every CSA farm needs: access to key resources

Every farm needs access to key resources in order to get started, grow food and continue operating. We identified six key resources that all CSAs need: two focused on people; two on physical assets, and two on financial necessities. For each we looked at how much of each CSA farms use, and where they get them from.

The six key CSA resources for CSA farming, and how we measure them, are:

- **Members / customers:** the number of members (or customers), who pay for a regular subscription to cover the cost of receiving farm produce over a growing season or full year
- **Staff:** the number of people the farm business employs and pays to carry out its activities, in full time equivalents (FTEs) per year
- **Land:** the area of land which the CSA is using to carry out its activity each year, in hectares
- **Capital equipment:** the value of long-lasting equipment the CSA purchases each year for its core activities
- **Working capital:** the amount of cash the CSA has available to pay bills until the income comes in
- **Grant support:** the financial contribution that the farm accessed from other organisations to support its work

The key resources of our eight CSA farms

Indicator	Year 1			Year 5			Year 10		
	mean	max	min	mean	max	min	mean	max	min
Members / Customers	42	70	20	78	126	48	108	192	55
Staff (FTEs)	1	2	0	2	4	1	3	4	2
Land area (ha)	2	4	0.2	2	4	1	3	4	2
Capital equipment	£11K	£51K	£2K	£4K	£12K	0	£13K	£21K	0
Working capital	-£21K	-£59K	-£1K	-£8K	-£26K	-£10K	-£3	-£22K	£39K
Grants	£24K	£54K	0	£10K	£22K	£2K	£8K	£11K	£2K

What we found out about CSA use of and access to key resources

Customer numbers

CSA businesses can start small: it needs just 20 or 30 initial subscriber members to get a CSA up and running. This makes CSA start-up suitable for one or two part time growers, alongside work in another part-time job elsewhere. The minimum size for an enduring CSA is 80+ members - so new CSAs need to expand quite rapidly to reach this. Those CSAs that stay very small do not seem to last many seasons. The need for at least 80 members is scale. On the one hand you'll need to plant a similar variety of crops

whether you have 20 or 200 customers. On the other, many overheads like a delivery van, insurance and energy bills have a fixed basic cost that increases only to a modest extent as membership numbers grow. There are not many large CSA businesses: they tend to stay modest in size, serving up to around 200 members

“We’ve never struggled to find good customers for our food – the demand is out there and people are willing to commit to a farm to get good food”

Staff numbers

Like most farms, CSAs rely on the work of a small number of dedicated staff. Most start with one or two staff and take on additional workers as they grow – often for a long growing season from April to October. Finding, training and holding staff with all the skills needed to grow a wide range of veg, run the business and interact with members is a big challenge. Most workers are trained ‘on-the-job’ as there are no suitable courses at UK colleges and universities to prepare a ‘pipeline’ of CSA growers and entrepreneurs. Wages and salaries represent a very high proportion of CSA costs compared to other small businesses with up to 80% of total business costs going on staffing, alongside very low investment in field equipment. Being so labour-reliant is a weakness: wage rates remain low, unpaid hours are commonly worked, and there is high risk of staff burnout.

“Ten years ago we advertised for staff and got zero people apply. Now we get 50 or 60 applications for our seasonal jobs, mostly from younger people wanting to work in the low carbon economy. That fills me with hope and we need to open our arms, welcome them, train them and put them to work”

“There are definitely ‘steps’ in growing a CSA business – we struggled to go from one to three staff, as pay costs are high, but now we are there we feel the business is more secure and can keep going. We really could have done with some financial help to take that big step, and train and pay two new growers”

Land area

CSA farms don’t take up much area – usually only two to four hectares of production land. But they do need good quality land to grow a wide range of food and this can be hard to purchase or rent in small parcels or close to towns. Many CSAs rent within a larger farm or rent community-owned or charity-owned land. This is good for getting started without having to buy land, but can hold the business back from investing in facilities and buildings, or having the security of tenure needed to take out loans or attract grant aid.

CSAs are unlikely to grow their business by taking on more land, unlike larger farms. This is good for the state of the planet: each CSA business is a compact and whole unit that serves its immediate community. However, it can mean public agencies and existing investors find it hard to understand community supported agriculture, as they may still follow the paradigm of eternal growth and economies of scale.

“Lack of secure land tenure has been a nightmare for us - we are on annual lets and no one will support us because of this, or give or lend us money to build a shed and packhouse, as we don’t have secure tenure”

“We have a really supportive farmer who rents us the land. It’s been the bedrock for us.”

Capital equipment

CSAs tend to be undercapitalized, investing a total of £20-30,000 in equipment over the first five years, even as their annual turnover is heading for £100,000. That is a very low capitalization rate compared to most farms, where the capital ratios will be two or three times more. The major investments are in field machinery, polytunnel growing structures and building for storage and veg packing. Most farm machinery has around a ten-year life span and you'd expect to be renewing about 10% of that each year.

Among the CSAs we looked at, the value of farm capital is decreasing faster than the rate of investment. They are only investing when they feel they can, not planning it. CSAs need help to plan and make long-term investment in business equipment, but most are only able to invest 'when the sun is shining'. This leaves most CSAs over-reliant on manual labour that holds back productivity and leads to physical exhaustion.

"Equipment is expensive and often suitable small-scale kit is not even available in the UK – we need help to find and buy better kit, so we can be more productive in the field."

"We rely too much on manual labour. If we could have afforded better kit, we would have developed our CSA faster and saved ourselves a lot a backbreaking work."

Working capital

Start-up CSAs face an early and tricky hurdle: they will need at least £20,000 in cash to cover start-up costs, before the income starts to come in. While this working capital 'gap' is smaller than many other production and retail businesses that may have to find £60-80,000 to buy stock and fit-out premises it is still a very real barrier to entry. Very few younger people entering small farming have this kind of money to invest, and the low expected return on investment means that banks are unwilling to lend. Securing a grant or grant/loan mix of £20,000 in the first year of a CSA can really make the difference between success and failure.

"Our biggest problem has always been working capital – we know we will get the money in when we sell the veg, but we struggle every day to pay bills on time. It makes a great job really stressful."

Grant support

Two-thirds of CSAs receive some start-up grant funding, typically £30-50,000 over the first two years, with most funding going to charitable or social enterprise CSAs to pay for staff. Various lottery funds have assisted in this way, to support healthier diets in low-income areas, or social enterprise start-up more generally. This contrasts strongly with CSA operators that start up their own business, or farms that move into community supported agriculture; they are much less likely to get any grant aid, and if they do it will be for capital equipment, and from public agency sources.

This pattern does not appear to be the best way of investing in start-up help. Starting out with a revenue grant can seem fantastic, providing a high level of staffing and staff security at the beginning of the venture. However, CSAs that have received a large initial revenue boost have really struggled when that funding ends and have had to suddenly reduce their staffing. This can lead to a business or staffing crisis from which it may never recover. A better allocation of resources for successful aCSA start-up would be

modest revenue help for a business manager for the farm (but not the growers) combined with greater capital investment support in good kit and suitable buildings.

“The start-up costs are scary for me as a new entrant CSA farmer.”

“Farm support funding needs to change completely – we get nothing because we are too small to even register on the system.”

“Farm grants are often technology based, and community grants are usually staff based - what we really need is grants that reflect OUR needs in order to develop”

What does this mean for the development of community supported agriculture?

Pointers on key resources for CSA farm businesses:

- Existing CSA businesses in the UK start as micro businesses and grow within five years to be small businesses, but so far none have grown into larger businesses
- Community Supported Agriculture is a relatively low investment route into farming with most start-ups renting a few hectares of good quality agricultural land and needing £20-30,000 to get started
- To succeed, CSA farms need to reach a minimum of 80 annual subscribers and £60,000 turnover by year five. If you don't want to run a business of this size, or think you will really struggle to get there, then you should think about pursuing a different local food business model
- Skilled, hard-working and multi-tasking staff are central to CSA farm success – CSAs need the equivalent of two full-time staff, five years after starting. People are attracted to work in CSA farms but there is no available pool of skilled growers or system for training them in the UK
- Using volunteer labour can help CSAs grow at low cost and fulfil the aim of involving members in the day-to-day running of the farm. But don't build the business based on free labour: it won't always be there. As well as field work, volunteers can help with admin, box packing or deliveries
- Most CSA farms are over-reliant on manual labour and struggle to invest in useful equipment. CSAs that last more than five years are spending more on outside services (like a bookkeeper, agronomist, or farm contractor) and have invested in good kit (like a packhouse, field machinery, or polytunnels)
- It is possible to start a CSA with one grower and no external support – but they are quite likely to burn out after two or three years due to over-work. Much better to look for some funding for your CSA start-up; existing farms transitioning to CSA typically access agriculture grants for £15,000 of equipment. New CSAs that are social enterprises have accessed lottery and other funds for up to £60,000 of staff cost support, over two to three years.

Pointers on key resources for the CSA Network UK and policy makers wanting to see more CSA farms in UK:

- The number of CSAs in the UK is increasing quite rapidly, each serving their own community. Many are gradually expanding but they do not normally turn into big businesses. This proliferation model is succeeding and is quite different to conventional food businesses that grow big by expanding into new geographical markets and products

- CSAs sit at the intersection between diversifying agricultural businesses and green social enterprises. Existing farms and new social enterprises have very different sets of expectations, support organisations and funding streams. CSAs work best when they combine the best of these business types. Blurring the boundary looks most likely to work: by supporting farms to be more social and work with their local community at the same time as assisting social enterprises to grow and sell food to local people and stand on their own feet
- At the moment most farms diversifying into CSA are able to access some grant help, but it tends to be too little to succeed and not for the resources they need most. An ideal package of help for a start-up CSA business is around £20-30,000 for equipment, £20-30,000 to support staff costs for two years, plus external advice from a CSA mentor. Spending around £50,000 over two to three years to create a self-supporting new business employing two staff and feeding 80 local households with healthy local food, is proven to work and offers a good rate of social return on investment

How CSA farms perform: some business benchmarks

Setting up and running a business is made a lot easier if lots of similar businesses have already trodden the same path. If you want to set up a coffee shop there are books and web tutorials full of sample business plans, finance profiles and tips to follow. For farms in the UK there is the Scottish Agricultural College Farm Management Handbook¹ and the Organic Farm Management Handbook². But even the farm handbooks do not cover new business models like community supported agriculture, or farms selling direct to their customers in the local food economy.

To fill this gap, we identified and measured six basic benchmarks for CSA farms:

- **Shares per hectare:** how many subscriber households the CSA can produce food for on each hectare of production land
- **Value of each CSA share:** the price subscriber households pay for their share of farm produce over a full year or growing season
- **Produce value per hectare:** the value of food grown on the farm and sold to subscriber households, per hectare of production land
- **Shares per staff member:** the number of subscriber households that food is grown for by one full-time equivalent (FTE) staff member
- **Produce self-sufficiency:** the proportion of food supplied to subscriber households that is actually grown on the farm, with the rest bought in from other farms
- **Length of supply season:** the number of weeks that subscriber households receive produce from the CSA each year

Business benchmarks for our eight CSA farms

All values adjusted for inflation to 2023 values

Indicator	Year 1			Year 5			Year 10		
	mean	max	min	mean	max	min	mean	max	min
Shares per ha	28	60	18	38	44	32	34	48	28
Annual share value	£370	£644	£125	£456	£522	£334	£545	£750	£464
Produce value per ha	£6.7K	£18.8K	£2.8K	£8.5K	£13.2K	£4.1K	£6.4K	£9.2K	£5.7K
Share per staff FTE	31	120	35	54	60	50	51	77	37
Produce self-sufficiency	98%	100%	97%	88%	91%	84%	92%	93%	88%
Weeks of supply season	31	50	20	44	52	26	46	52	34

¹ <https://www.fas.scot/downloads/farm-management-handbook-2023-24/>

² <https://www.organicresearchcentre.com/resources/the-organic-farm-management-handbook/>

What we found out about business benchmarks for CSAs

Shares per hectare

Across all the CSA farms, the number of households supplied with food from each hectare of production land is on average around 30 per hectare. CSA veg farms grow on 300 square metres per subscriber: very close to the standard UK allotment size of 250m², but producing more over the course of a season. This is the same as the Anglo Saxon 'plot of 10 perches' allotted to feed every family in medieval times.

"In five years, we have not increased our production land area, but we have doubled the productivity of the land we have – looking after the soil, using a bed system and extending our cropping season have transformed what we can grow"

"The production per hectare figures are at the lower end - our CSA produces even more."

Value of each CSA share of the produce

The price of a season's produce to each CSA subscriber household varies a lot when CSAs start up - from £125 to £650. This wide range comes from new growers under-valuing their produce, shorter supply seasons in the first couple of seasons, and prices being subsidised by revenue grants in social enterprise start-ups. After a few years the annual produce value rises and becomes more consistent across farms - from £464-£750. Typically, customers pay £12-20 each week, for a year-round share of the produce. The increase in share value is needed to meet the full costs of running the farm, after the supported start-up period.

Members seem to increase their spend over time: from both a longer supply season and a wider range of produce for sale. It also means that CSAs don't just rely on increased numbers to grow their business; the existing member base is growing in value at the same time as the CSA is recruiting new customers.

CSAs tend to undervalue their produce, are disinclined to increase prices when costs increase, and feel they've got to keep their prices down to help low-income households access their food. This ethical stance can affect survival: the full costs of growing the food do need to be priced into the share, and several CSAs struggle with this. A more secure way to enable lower-income access to good food is to raise funds, either from better-off members or from public/charitable sources, to subsidise the share price. We saw good examples of this in several CSAs, running different prices according to income bracket, or running healthy food prescription schemes to provide CSA access to people with diet-related health conditions.

Overall, CSAs are still under-charging for the food and service they provide, and several CSAs that are struggling have kept prices falsely low for many seasons.

"Food prices are so low, that after several years the CSA is still not making a surplus - this makes us reliant on grants and unable to grow any further."

"customers start off thinking our food is expensive because they're used to cheap food...but after a while they taste the difference and love the farm, and when they volunteer on the farm and find out how hard work it is and how little we earn...then they really change their tune."

Produce value per hectare

We were bowled over by the data on this: on average, each CSA hectare is producing £6-8,000 worth of food. For comparison, the average value of spring barley produced per hectare is £1,400, and that is in a good year. Additionally, CSAs grow a great variety of crops, often 50 or more types of fruit and veg, eaten fresh without any processing that removes nutrients. This increases the health value produced, even if it's not priced into the subscription.

The level of CSA production value per hectare is outstanding and a really strong message for CSAs. It shows that extra value can be added to an existing farm by hosting a CSA on only a few hectares.

“Yep, small and diverse is very very productive.”

Shares per staff member

At start-up, each CSA full-time grower can produce enough veg to supply around 30 subscriber households, each year. Over time, as staff become more experienced and additional staff join the business, this increases to about one staff member to grow food for 50 households.

With an average annual vegetable share of the produce priced at £550, each staff member is growing £27,500 worth of food. By comparison, the average farm worker produced farm gate value of £51,700 in 2020. CSAs staff are producing around half the industry benchmark for staff production value. The low value is due mainly to the focus on manual methods of food production on CSA farms. It also explains the relatively low levels of pay for CSA workers.

“This is the best job: it's fast-paced and challenging, I work outside, run my own independent green business and I'm supported by really appreciative customers. I just wish I earned more for doing all this - I've given up ever being able to buy my own home.”

Produce self-sufficiency

Our CSA farms grow around 90% of all the food they sell. In the first year they usually don't buy in anything in. They soon realise there are some things they just can't grow or decide they're better off buying potatoes from a farm with a big harvesting machine. By year three, the proportion settles down to around 10-12% of veg being bought in (by value) and stays at this figure. UK CSAs grow almost all their own vegetables and fruit, often growing a variety of 50 or more different crops. By comparison, most UK veg boxes that do not operate as CSAs grow around 50% of what they sell and buy in the other half, often from overseas in winter and spring.

“We were a bit scared to buy in and felt that maybe we were failing to grow 100% ourselves. But actually 90% of our own produce is amazing and small amounts of buying from a nearby organic farm has helped our business and taken the pressure off us.”

Length of supply season

We were impressed by how long CSAs are able to sustain their harvests and feed their members. CSAs start harvesting veg for between 26 and 52 weeks in their first year (average 31 weeks) and increase from then onwards. From five years in, half of CSAs are growing and supplying veg all year round, and the remainder for 40 or more weeks, with a 'hungry gap' of 10 weeks from April to early June.

Compared to the vegetable supply season of most conventional growers, who often specialise in one crop and have a harvest window of a maximum of 20 weeks, CSAs are able to supply fresh food for most of the year. This is a tribute to the hard work and ingenuity of CSA growers, as they grow numerous crops, using different varieties to deliver long cropping windows that reduce food imports and make them more resilient to external supply shocks. It also gives the CSA farm a stable, year-round income.

“Extending our season has really improved financial viability and customer satisfaction.”

“I am constantly amazed at the range of produce we can grow, the volume of food our soil produces and the length of season we can supply without heat. And we do all this at 600 feet up and 57 degrees North. If we can do it here, you can do it anywhere in the UK.”

What does this mean for CSA development?

We asked our wider group of 40 CSA farmers about the usefulness of this sort of benchmarking to their business and to the development of CSAs in the UK. This is what they had to say:

Would a benchmarking and an annual business review be useful to your business?

“Yes, help us be more confident in making decisions.”

“Yes, help us to see where we are on developing our CSA farm and where we are going next.”

“Yes, good to show our funders and potential investors in the farm.”

“I’d need a business mentor to help me make use of this.”

“How about a set of ‘social benchmarks’ as well as the economic ones staff pay, volunteer hours, access to shares for lower income households, satisfaction rating from staff and subscribers.”

“We’d like to work more closely with other CSAs on things like this. As well as benchmarking, an annual review of the business, our pay rates, prices and access to grants would really help.”

What messages do we share about CSA based on this information?

“Consumers are a real part of ‘their’ farm, and the farmer is a real part of their community.”

“Grower pay is low compared to other jobs with similar high levels of skill and responsibility – trades like electrician or plumber get paid twice what food growers do. Why is that?”

“CSA makes you feel good! It is worth the extra effort.”

“There’s something of a cultural rift between our farm and the local, mostly commuter, community – we need help to explain what we are doing and why good local food matters and is not a weird thing to do.”

“You gain a lot of confidence running a CSA – you can grow food, feed people well and create a great place that welcomes people and gets them to work together.”

“We’ve adapted our ‘storytelling’ as we’ve grown the number of CSA members – to start with, it was all about organic food and a pioneering new idea; but now its about healthy local food and helping avoid supermarkets and plastic packaging.”

And what does this tell us about CSA as a tool in wider social and policy decisions, like climate change and land use?

“CSA is local food security.”

*“CSA makes **very** efficient use of land for food production.”*

“This is such a positive message to go out and tell people, particularly when you're talking about policy changes in land use, because the area of agricultural land has got to decrease over the next 30 years so that we can make space for nature and for trees for (carbon)sequestration, and probably to create space for agricultural fuels for (bio)energy plants as well. This is showing that you can feed a lot of people off a small area and then use the excess land to carry out other essential services.”

“When southern Spain runs out of water in 15 year’s time, and the supermarket shelves are empty of cheap Mediterranean veg, then we’ll suddenly need a CSA around every corner...so we’d better get on with it and set them up NOW!”

What every CSA farmer worries about: financial performance

International borders are largely open for trade in food around the world, which means food prices in the UK are set by who can produce it anywhere. Half of all the fresh fruit and veg we eat in the UK is imported, from places like southern Spain and Morocco that have very low, often illegally low, wages and are using up finite resources like water and soil, and using oil and gas in fertiliser and long-distance transport. It is very difficult for farms in the UK to compete and survive against this open market. Only one quarter of all the farms in the UK cover all their production costs: three quarters of UK farms rely on farm subsidies to stay afloat.

Understanding how CSA businesses perform is essential to their future development; they will only survive and thrive if they can cover their costs. Existing farmers will only adopt a CSA business model if they can see it is working financially.

We measured five indicators of CSA financial performance:

- **Gross margin:** the proportion of a company's revenue remaining after paying for the direct expenses of production, such as wages and materials. The higher the gross margin, the more revenue a company has to pay its overheads, repay loans, invest in the business and pay the farmer
- **Gross Value Added (GVA):** A measure of productivity for comparing different types of business and areas - the value that producers have added to all the seeds, labour and services they have bought in
- **Surplus before grants:** the profit a CSA will make when any grants it has received are removed from the accounts - the farm’s ability to support itself without external financial support
- **Customer churn:** the proportion of subscriber households that leave and are replaced by new customers each year as a percentage of total membership. It’s a good measure of customer satisfaction and how long customers stay to support the farm
- **Cash flow recovery date:** the point in the year when business cash flow returns to zero, after the outflow of funds for spring planting. From January to June, CSA farms are spending money on establishing crops for the season ahead. Only when harvest is ready from June onwards, do they get that money back

Financial performance of our eight CSA farms

Indicator	Year 1				Year 5				Year 10		
	mean	max	min		mean	max	min		mean	max	min
Gross Margin	40%	43%	36%		27%	52%	18%		41%	44%	38%
GVA	79%	80%	74%		59%	60%	55%		63%	75%	61%
Surplus before grants	-59%	+39%	-250%		-9%	+21%	-21%		17%	18%	12%
Customer churn	2%	3%	0		7%	9%	0		17%	18%	12%
Cashflow recovery date	Aug	Oct	July		Aug	Sept	July		July	July	July

What we found out about CSA business performance

Gross margin

Some CSA farms, particularly smaller ones, spend 80% of their income on salaries and inputs, leaving only 20% for overheads and investment. They are stuck being over-reliant on manual labour and struggle to invest in useful equipment or external help. This is hard work and can lead to grower burnout and eventually business failure.

You may be able to survive working long hours for very low pay using minimal equipment for a season or two. But if you want your CSA to last, aim for a 40% gross margin: spend 20% on inputs, 40% on wages, 20% on overheads and external services, and 20% on investing in the growth of the business, repaying loans and buying better equipment. Achieving this balance is not easy – it can mean higher prices for customers and looking for external sources of help to finance investment.

Gross Value Added (GVA)

CSA farms add 60-75% of value to all the labour and inputs they buy in. Sowing seeds and letting nature nurture them should have a high GVA - but even so, CSA farms are adding more value than most UK farms. Part of the reason may be negative, as CSA farms may not be covering all costs, such as paying for all hours worked and keeping up with asset replacement. But mostly it is positive and shows effective use of the natural resources they can access, and efficient use of small land units to produce a lot of good food.

Surplus before grants

As discussed before, some CSAs receive grant funding in the first start-up years, and some social enterprise CSA start-ups are very dependent on grants for their staff costs in early years. By year five, CSAs receive only a modest amount of grant funding mostly for capital investment in equipment to help them expand. By year 10, all the CSAs that have made it have a steady and positive surplus before grants. However, a modest continuing level of grant assistance would be a positive sign that CSA farms receive match funds to invest in expanding operations and improving efficiency.

“Spot on. We started out with some grants, then struggled without them, and now, after 20 years our CSA is covering all its operating costs, but we don’t have any money to invest in the farm.”

Customer churn

Subscriber churn is very low in the first year of CSA operation and quite high in the second year (not seen in the average figures). This could be because CSAs initially attract members who don’t really know what they are going to get! Or it could be that CSAs over-promise in the first year and are struggling to deliver it all by the second. This settles down in year three, after which levels of churn are low. A 15% annual churn is average in the longer run – which is equivalent to a customer staying as a weekly customer for seven years, which is excellent. Churn rates of 10-15% are to be expected, but churn of over 20-25% in a year is a cause for concern.

“Yes, we did get a bit more customer churn when we expanded. We wondered what we’d done wrong? But maybe it’s just less committed members joining in. We’ve got used to it now.”

Cashflow recovery date

There was not enough information to draw clear conclusions, but from the farms with data, it appears that CSAs go into a negative cash position in March, when they're buying in inputs like compost, seeds etc, and get back to zero overdraft by July. This is a very healthy cash flow position and much better than most conventional farms, which go into a negative cash flow position in February when they buy their fertiliser and don't come out of it until November when they sell their crops. Most CSAs ask their customers to pay monthly in advance and to commit to a year of purchasing; this subscription model is a secure base for running a small farm, and requires minimal use of bank overdrafts.

“Having a positive cashflow and no bank overdraft is the best part of running a CSA business.”

What does this mean for CSA development?

We asked our wider CSA farmer panel what would help them improve the financial performance of their farm:

- Template accounts package for managing a CSA that can track key performance figures
- Access to a paid accounts service for CSAs to keep business accounts
- Better data capture and government data collection and review systems to capture community supported agriculture and other small and diverse farms running local food businesses
- Publish CSA farm data to encourage conventional farmers to convert part of their farm. CSAs have a very low debt profile. If a larger existing farm sold some of its land, to pay off debts, it would be able to set up a CSA, a business that isn’t highly leveraged and serves its own interests and that of the community
- Access to grant funding or interest free loans to develop a CSA – with the loan paid back using the value of the public goods the farm delivers, rather than through cash repayment alone. This would help expand CSAs and improve productivity, while keep them focused on making investments that can deliver high social value

Interventions by organisations wanting to see more CSAs farms in UK:

Reward CSAs for delivering public goods on their farm:

- Support true pricing of food by developing a pricing tool for CSA businesses to use
- Reallocate government subsidy for farming away from land area occupied and into direct support that pays for the public goods each farm delivers
- Create a publicly funded 'CSA Start-Up' support package for existing farms and new entrants to set up a CSA business in their community with a three-year mixed support package

Focus on improving GVA on farms through increased investment in CSA businesses:

- Grant funding and 'soft' loans for CSA investment, with repayment in kind based on the value of the public goods the CSA business delivers: a social return on a public investment
- Create a joint investment fund for CSA expansion: an 'Angel Fund' comprising public, private and philanthropic monies, managed to provide both rotating soft loans and direct investment stakes in CSA businesses wanting to expand, after they have completed their grant-aided start-up phase

Measure the value of good healthy food created by CSAs and recognise their contribution to a lower-carbon and healthier economy:

- Set up an impact measurement tool for CSAs (along with other market gardens)
- Conduct annual collection of data and publication of findings
- Use and promote this data within public policy and debate, to show community supported agriculture as a 'positive adaptation' solution to the joint crises of climate, nature and public health, that can be rapidly deployed using a modest re-direction of existing resources within most UK communities

How CSA farms grow and thrive: success indicators

The first CSA farms in the UK started around 1990 and they remained an uncommon type of farm business for 20 years even though numbers were growing rapidly in the USA. More recently, the frequent market shocks - financial crash in 2008, followed by austerity, Covid pandemic, and now the cost-of-living crisis – mean community supported agriculture is spreading faster as a new farm business model. It is also attracting public policy attention as a suitable community-level response to the crisis levels of climate change, nature depletion and diet-related public health. We wanted to understand the factors that indicate success and enable CSA farms to last longer and thrive.

The four indicators of success for CSA business are:

- **Full cost convergence:** the proportion of costs that the business is able to pay from its earned income
- **Capital replacement ratio:** the proportion of annual depreciation of capital equipment in the business that is replaced through buying new equipment each year
- **Capital replacement actual:** the proportion of each year's turnover that is spent on capital equipment investment
- **Staff pay rate per hour:** how much staff are actually paid per hour worked (this excludes volunteer labour which is freely given but includes unpaid hours by paid staff)

Success indicators for our eight CSA farms

Indicator	Year 1			Year 5			Year 10		
	mean	max	min	mean	max	min	mean	max	min
Full cost convergence	-32%	-	-	+1%	-	-	+21%	-	-
Capital replacement ratio	-	-	-	-31%	-	-	-23%	-	-
Capital replacement actual	-	-	-	3%	7%	0	8%	21%	0
Staff pay rate - £ / hour	£8.66	£14.21	£8.01	£9.61	£10.68	£2.89	£9.93	£10.69	£9.72

What we found out about CSAs success indicators

Full cost convergence

It takes five years of trading for every CSA business to be able to pay all its production costs. This is two years longer than most CSA farmers envisaged and planned to reach breakeven, and three years longer than most non-farming small businesses. During their start-up year, CSA food sales only cover two thirds of production costs, and transitioning farms - like most small business start-ups - rely on unpaid labour by the entrepreneur: often referred to as 'sweat equity'.

In years two and three, sales income increases faster than costs so that by year four half of CSAs are breaking even: particularly those that are run as private businesses or are part of a larger farm. The other half s took two further years to break even, especially those that received significant start-up support for

staff costs. These businesses are more likely to externalise all their costs and not rely on ‘sweat equity’, and are somewhat cushioned from the pressure to break even, due to grant funding in their early years.

By year five, all CSA businesses are able to cover all their costs and are breaking even. They then continue to build on this success, and start to produce a surplus of income over costs that enables them to invest in the business. But we warn: it does take three to five years to get there!

“Years three to five were tough for us. We’d lost that initial excitement, but weren’t making enough income to cover all our costs. That’s when we were most vulnerable and could easily have gone under.”

Capital replacement ratio

We already know that CSA farms invest only an average of £11,000 in equipment when they get started. The capital replacement ratio tells us that this gets even worse over time. Each year, as equipment ages, it reduces in value: this is called depreciation. CSA businesses are spending less on buying new kit each year and the value of kit they have is falling. CSA businesses are not even keeping up with replacement, let alone spending more on better equipment. This is a worrying long-term trend for CSAs, and their future production costs will remain high as they continue to be very reliant on manual labour for most production operations.

“We are in year 10 of our CSA and we have positive figures and are now able to invest a bit each year – it’s been a long haul to get here!”

Capital replacement actual

CSA businesses are spending around seven or eight per cent of their annual turnover on new equipment and buildings. Only one CSA was spending a lot more, at around 20% of turnover – interestingly, this was made up of five per cent from their farm income, five per cent from ‘soft’ loans, and 10% from agricultural grant aid.

CSA businesses need to spend about 10% of their annual turnover just to keep up with replacement of existing kit. And if they are to grow and increase productivity - and therefore increase their wage rates - they need to be spending an additional 10% on new and better equipment, or other capital assets like a packing shed, or winter veg storage.

The good news is that most CSAs can afford about 40% of the investment they should be making: the difficulty is consistent access to agricultural grant aid and other sources for the further 60% of the investment funds they need.

“Spot on: after 20 years our CSA is covering all its operating costs, but we don’t have any money to invest in the farm or pay our staff properly.”

Staff pay rate per hour

Between 40% and 60% of all CSA food production costs are labour – a very high level, usually only seen in service industries. After five years in operation, CSA businesses are just about managing to pay their staff the national minimum wage. In the early years, most average less than this, as the farmers (often other

staff too) are working unpaid hours (our figures exclude labour from volunteers). Wages are very low on CSA farms: they are on most small farms and market gardens across the UK. This is an endemic problem for small farms, and CSAs are paying their staff more than most small farmers receive themselves.

Low pay in CSAs is offset by highly motivated staff, doing interesting and worthwhile jobs. But after two or three years, staff often leave CSA businesses for better paid jobs. This is a loss of experience and leads to having to train new staff, which is time-consuming.. There is no career path within CSA that rewards experience and responsibility with higher wages. Some CSAs do pay the higher real living wage, and one is paying £15 an hour. Some farms give support in other ways, such as on-farm accommodation and free vegetables. Unfortunately, as most people find out, the minimum wage is not really enough to live on long term.

“We need to aim to pay £30K a year to full-time staff with two years’ experience – they deserve to be earning at least the average UK wage for doing such a demanding and complex job.”

“Retaining staff is a huge headache for us. We’d like to offer them more. We need a Basic Income for farmers.”

What does this mean for CSA development?

Pointers on business success indicators for CSA farm businesses:

- Expect your CSA to take three to five years to become established and cover all costs. Meanwhile, you will either have to put in a lot of ‘sweat equity’ or find grant funding sources to cover all the costs
- Once fully established, CSA businesses are stable and self-sustaining businesses, still capable of further growth if they can invest in better equipment and enhanced staff skills
- Most CSA businesses are under-capitalised, and struggle to invest enough to even keep up with replacing their ageing equipment. This makes CSAs over-reliant on manual labour meaning a lot of back-breaking work. This could be overcome with some investment, which would improve productivity, wages and staff retention
- Aim to invest 20% of turnover from years five onwards, spending this on equipment, buildings and skills. In addition to money from your business, apply for grant funding for the investments you make and join shared training programmes
- Record all staff hours worked, both paid and unpaid. Aim to pay above the national, minimum wage if you can, and more to experienced staff. Be open about telling your customers and your backers how much you earn. Explain why pay is low on small farms, and how they can help address this
- Set a price for a share of the produce that includes all the cost of producing the food, plus 10% to renew kit and expand and improve the business

Pointers on business success indicators for organisations wanting to see more CSAs farms in UK:

- CSA businesses start off able to cover about two thirds of their production costs, and take three to five years to reach full cost recovery. They will need a modest and consistent package of support over this time to become fully established

- Once fully established, CSA businesses are stable and self-sustaining, with the capacity for further growth if they can make continued investment in equipment and skills
- Established CSA businesses make a small surplus that is available to reinvest in the business, but only about 40% of the investment level needed to grow the business and increase productivity. In order to make the most of their business potential, CSA businesses need access to capital investment grants at an intervention rate of around 60%
- The UK needs a skills pipeline to train skilled workers to run CSA businesses and other market gardens. People want to do it and it's a highly skilled job, but there is no specific training for them in the UK. Existing CSA farms are willing to participate in training new entrants and in workforce development, but lack the resources to do this on their own
- Low pay is endemic in manual farm labour, including on CSA farms. 'Fair Work' standards are currently unachievable for all staff, including most farm owners/operators. This is holding back farms from adopting the CSA model, which makes retaining skilled staff more difficult, and is failing to reward take-up of new job roles within farms. Low farm pay needs action at national policy level – various ways are being advocated to enable this, mostly through redirection of farm support payments. For instance, activity-based grant eligibility (in Wales); labour-based rather than area-based farm subsidy (in Scotland), and the Basic Income for Farmers movement (across the UK). Existing farm support fails to reward farmers and staff who are working hard to adopt new, low-carbon, agroecological and healthier food production. Until the low pay issue is properly addressed, the transition of farms into delivering better food is being held back, and existing CSA farms will struggle to grow their businesses.

The biggest economic barrier to CSA development: the benefits delivered are not getting paid for

So, if CSAs are resilient, more communities want one in their area, and farms are looking to diversify, why aren't CSAs taking root rapidly across the UK?

The number of CSA farms is growing in number – but only gradually. Those starting out at the moment tend to be social enterprises with start-up support, or new farm entrants. Very few CSA businesses are taking root within existing farms or landholdings. Existing CSA businesses are staying small in size. There is currently no incentive for farms to adopt community supported agriculture, to enable them to invest and grow.

The food and drink sector in the UK is worth £127bn to the UK economy (2023): up 31% since 2007. But farming Gross Value Added (GVA) is only £11bn of this – less than 10% of food sales value, and just one per cent of the UK economy – a position unchanged since 2007. It requires £6Bn of government subsidy each year to make it happen.

In the current supermarket-dominated food supply chain most farms make a loss as they have to sell at low global prices. They are supported by the government so they can provide low-cost inputs to the food industry and food service, which makes a much larger contribution to the UK economy and so is given precedence. Even large farms are small compared to the supermarkets and this, combined with their lower place in the food supply chain, means they are held at a structural disadvantage, as they come low down the food supply chain, and are much smaller than those higher up.

Making food supply chains fairer for producers is one of the biggest challenges facing farming, land use and future food security in the UK. Conventional growth economics justifies governments subsidising loss-making farming because it adds value to processed foods for sale on a global market. In contrast, a circular economy needs farms to use and safeguard natural resources, provide fulfilling jobs, reduce carbon emissions and deliver fresh healthy food. CSAs are already showing their ability to deliver a business that is a positive adaptation to current crises, evidenced by their high levels of added value, agroecological methods, and production intensity.

The problem for CSA farms is that their ability to add value to local natural and labour resources is not being reflected in an increased price for the food they grow. Their prices are still set mostly by matching cheap imports that come with none of the benefits of good healthy food. If CSA farms were paid for the non-priced benefits they generate - rural jobs, healthy food, carbon reduction, nature restoration and community cohesion - they would all be financially secure, be able to pay their staff a full wage for the job, and have some surplus to invest in their farms.

To give a stark example of this, one of the CSA farms had collected data on the value of the social benefits they produce as shown in the table below:

2023	output	Market value	Social value
------	--------	--------------	--------------

Carbon negative net CO2E lock up	-72 tonnes CO2E	£0	£9,000 (Stern) ³
Jobs created (FTEs)	3.2 jobs FTE	£0	£16,400 (HIE, SE ⁴)
Healthy food 25% of diet base	220 local families	£143,228	£12,600 (ISU ⁵ , CCF ⁶)
Subsidy BPS ⁷ , AECS ⁸ , FWP ⁹		£2,542	
Profit		£228	
EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation)		£15,207	
Total value	£180,770	£142,770	£38,000

At present this CSA makes a profit of only £228 a year on a turnover of £143K of fresh food sales to its subscriber households. This means the farmer earns zero, for a 70-hour week, although all employed staff receive the real living wage.

The farm produces public benefits from being carbon negative, providing three jobs in a remote rural area, and feeding 220 households with healthy organic food. Using contingent valuation multipliers to calculate the price of buying these benefits, the farm *should* be paid £38,000 for the services it delivers to the community and environment, but the food price does not pay for this.

If this extra value of £38,000 of public benefit were paid for through farm subsidy – achievable within existing UK government budgets – the farmer would be able to make a fair living and have surplus funds to invest in expanding the businesses. Through demonstrating a return on investment in community supported agriculture and a fair wage for all staff - including the farmer - it would then attract and incentivise other innovative farmers to adopt CSA as their business.

Routes to reward CSA farms for the public benefits they provide AND attract more farms to adopt:

The current food supply system does not remain dominant because it is delivering an optimal solution. Long supply chains for fresh food have many disadvantages including transport emissions, over-packaging, ultra-processing to extend shelf life, soil depletion and food waste. Just under half the food we currently eat is imported even though we could grow it here in the UK – as CSA farms across the UK demonstrate. Fresh fruit and veg in particular is often grown in areas of the world already suffering water stress, and this is worsening with climate change.

³ Economic Impact of Climate Change Report 2015

⁴ Highlands and Islands Enterprise; Scottish Enterprise

⁵ Leopold Institute at Iowa State University

⁶ Scottish Gov Climate Change Scheme Food Impact Metrics

⁷ Basic Payment Scheme

⁸ Agriculture, Environment and Climate Scheme

⁹ Farm Woodland Premium Scheme

The current food system continues because it is cheap: its larger players are not paying for the waste, emissions, water usage or (often illegally) low wages. The fact that big farms and big retailers avoid paying the true cost of their supply system keeps food prices low: currently too low for UK farmers to make a fair living. Overcoming this market failure is essential to making food better and reducing its contribution to climate, nature and health emergencies. Left unchanged, the current food system will continue *not* to reward farmers who produce food that covers all the costs of production, stewards the land and delivers real and measurable public benefits. ‘Leaving it to the market’ is likely to see CSA remain small in scale, with continuing low wages, and no return on effort and investment to say nothing of the planetary destruction that goes hand in hand.

Below we suggest four possible strategies to reframe the market for fresh food:

1. **Correct the market failure:** legislate to cost in the externalities for the whole food supply chain – emission, pollution, air freight, health costs – and set a *true* price. Supermarket and imported foods will cost more. CSAs and small farms will be able to grow more of our food, compete, get a fair price and expand in scale. This is clearly not a popular option with existing large supply chains and their vested interests. This approach is being introduced in the EU, with the Carbon Border Adjustment Mechanism (CBAM) that sets a fair price on the carbon emitted during the production of carbon intensive goods that are entering the EU. So, it is possible, and even being looked at in the UK, but not yet applied to food.
2. **Create a protected market for good healthy food:** to stimulate more local food production, the government creates a protected market. This approach is already being used to incentivise the switch from fossil fuels to renewable energy in the UK. Ofgem controls prices and offers renewable energy providers to bid to provide, at average 15% higher prices, which are then paid for via customers' energy bills. This approach is working on UK farms, with anaerobic digester plants producing bio-fuelled methane to go into the UK gas grid. The farmers receive an index-linked price on a 20-year contract from Ofgem. So it is already proven to be possible and working in other areas of the low-carbon economy
3. **Pay for the public goods that are not priced by the market** – reward farmers for delivering public goods that are not getting paid for in the market, by paying them the contingent value of the social outputs per unit they actually deliver. This could either be through reallocation of farm subsidy payments: moving away from area-based payments for participating various land management schemes, and instead spending the same money pay farmers an annual amount for each job they create, each person they train, each household they feed with healthy food, each tonne of carbon they reduce their emissions, each tonne of carbon they sequester, and so on. The alternative route is benefit trading, where farms sell their benefit outputs to a third party, which then trades them to companies wanting to buy credits. This is the approach being used for carbon trading platforms, and is leading to £2Bn of investment in new forest creation in the UK, through credits bought by emitters and debits paid for from forest owners. It is not without its critics. The ability to price and measure non-market benefits has improved greatly in the past 15 years: for instance, farm carbon calculators like AgreCalac could measure carbon reduction and form the basis for future farm payments by the government

4. **Subsidise production of healthy food that uses natural resources and locks up carbon** – another way to reward farms that deliver public goods is to subsidise the costs of their production, allowing them to produce more, even when prices are below production costs. This is the approach used for many years to incentivise sheep production on the hills - the Less Favoured Area Support Scheme and the Beef Suckler Scheme. For CSAs, the two inputs to subsidise would be labour support payments for farm labour, and capital equipment purchase grants. A fruit and vegetable support scheme is needed to sit alongside those for beef and lamb. It could use standard labour units – which are high in market gardens – as the financing mechanism, and this has the advantage of already allowed under WTO ‘Amber Box’ regulations, as a form of subsidy

The choice of which option to pursue to correct the market failure in food pricing is a decision for the government which can set policy, introduce regulation and reallocate its spend to follow the policy. CSA businesses are unable to influence market structure and are currently ‘price takers’ in a very unfair, large scale and socially destructive market.

While prices for food continue to be set at the lowest global cost, then small farmers in developed countries will struggle to compete and emissions, nature destruction, water misuse and poor diet health will continue. Until a mechanism is found to pay CSAs for the public goods they can measurably produce, then they are going to struggle to deliver the goods while also being financially insecure.

CSA development is currently being held back by misallocations of value and costs in the food market and food pricing. It is only very determined producers who will choose to transition their business to CSA, or social enterprises serving some communities, under current conditions. Existing CSAs are likely to survive on minimal resources and at limited scale. A new pricing framework is needed to capture and reward the benefits of better farming, exemplified by CSA.

CSA farms can deliver and are resilient, but will only develop and thrive when they receive the full value of their outputs. As one CSA farmer told us:

“We can do it, but we do need to be rewarded for doing it.”

Recommendations to help CSA businesses grow and thrive across the UK

Actions within and between farm businesses:

- Be proud of what you are doing – CSA farms are highly efficient at feeding communities a healthy diet, using small areas of land. You are doing well in a hostile market environment
- If you are a large farm, look into entering a joint CSA business with a new entrant grower
- If you are a smaller CSA, look at how you can grow your business by working with other farms – maybe by renting land or sharing crop production or distribution
- Set out with realistic expectations: it takes five years to reach break even. Concentrate on your core business and then add in other elements over time – don't try to do it all at once!
- Keep records and carry out an annual benchmarking review of your business
- Record all staff hours worked – paid and unpaid. Aim to pay above the national minimum wage if you can, and more to experienced staff
- Increase staff expertise/specialism to increase productivity – you will have a farm lead grower: do you also need to appoint a farm business manager?
- Be open about telling your customers and your backers how much you earn. Explain why pay is low on small farms, and how they can help address this
- Set a CSA share price that includes all the cost of producing the food, plus 10% to renew kit and expand and improve the business. Charge a fair price which reflects your labour and don't give discounts without very good reason
- Recognise you need to invest at least 10% of turnover to keep replacing your kit, and aim for 20% to make your farm more effective. Look for grant aid or 'soft' loans to help you achieve this

Actions within and between support organisations, policy makers and funders:

- Tell the good news on CSA food production: it can feed a lot of people off a small area of land, while creating enjoyable jobs, improving diets, and looking after nature and the climate
- Visit a CSA farm and see how it works – is it a solution that can be more widely adopted in your geographical area or area of interest?
- Set up an impact measurement tool for CSAs (along with other market gardens). Collect robust annual data on CSA (and other small farm food production) to give benchmarks and reduce investment risks and publish the findings
- Use and promote this data within public policy and debate, to show CSA as a 'positive adaptation' solution to the joint crises of climate, nature and public health, that can be rapidly deployed using a modest redirection of existing resources within most UK communities
- Offer grant aid and 'soft' loans for CSA investment – with repayment in kind based on the value of the public goods the CSA business delivers – a social return on a public investment
- An ideal package of help for a new start CSA business is a mix of around £20-30,000 of grant for equipment, plus around £20-30,000 to support staff costs for two years, plus external advice from a CSA mentor and local food business adviser. Spending around £50,000 over two to three years, to create a source of start-up grants based on capital investment
- Create a joint investment fund for CSA expansion - an 'Angel Fund' comprising public, private and philanthropic monies, managed to provide both rotating soft loans, and direct investment stakes in CSA businesses wanting to expand, after they have completed their grant-aided start-up phase
- Establish a 'pipeline' of skilled workers to run CSA businesses and other market gardens – people want to do it, it's a highly skilled job, but there is nowhere to train

- Establish a training programme for CSA/small farm business managers, in addition to technical growing skills – business skills are lacking and are holding back investment and CSA growth
- Run labour-saving equipment, seed and technique trails and roll-out share that work
- Lobby parliament to adjust markets to pay for the benefits delivered by CSA farms – not being paid for the public goods delivered is the main barrier to CSA expansion in the UK.