Improving access to land for food production in Oxfordshire: what are the possibilities and where do we go from here?

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Contents

Why grow local veg?

1. A resilient food system

Oxfordshire's food system is heavily dependent upon imported fruit and vegetables from Southern Europe.

These limited supply lines could be strained by COVID-19 and be impacted by the outcomes of Brexit negotiations.

Recent research by Good Food Oxford suggests that demand for local fruit and vegetables exceeds supply.

It is feasible for Oxfordshire to contribute significantly to the resilience of its fruit and vegetable supply with the land available.

2. A flourishing local economy

In 2012, the £2.7 billion being spent annually in local food webs contributed £6.75 billion to local economies each year (Willis, 2012).

Pound-for-pound, money spent in the local food web supports three times the number of jobs as the equivalent spent in national grocery chains (ibid.)

In 2013, 51% of Oxford's food came from the UK, 33% came from the EU, and 15% was imported from elsewhere in the world. Less than 1% was being sourced directly from a local source (Curtis, 2013).

Nationally, 'fruit and vegetables' is the food category with the largest trade deficit at £10.2 billion (DEFRA, 2020a).

3. Health and wellbeing

In 2018, only 18% of children aged 5 to 15 ate the five recommended daily portions of fruit and vegetables (NHS Digital, 2019b).

Nationally, only 28% of adults eat five portions of fruit and vegetables per day (NHS Digital, 2019a).

Oxfordshire Joint Strategic Needs Assessment (JSNA) showed that over 50% of adults in Oxfordshire are overweight or obese (Melling, 2019).

20% of children in Reception, and one third of Year 6 children are overweight or obese in Oxfordshire (ibid.).

Low income familied find healthy eating to be less affordable (ibid.).

Locals have called for greater consideration of Oxfordshire's natural capital, the abundance of soil resources, and the sustainability and security of food (Oxfordshire Plan 2050, 2019).

Summary

- Oxfordshire's County Farm Estate (CFE) is comparatively small but has huge potential to be diversified by reallocating arable land to grow fruit and vegetables for local supply

- Currently, just 0.67% of the CFE land is used to grow fruit and vegetables, including allotments

- Including allotments:
    - Over 5 times as much CFE land is used for horse pasture as for fruit and vegetable production
    - Nearly 70 times as much CFE land is used for arable as for fruit and vegetable production
    - Nearly 95 times as much CFE land is used for grazing and mowing as for fruit and vegetable production

- Repurposing 8.3% of the county farm estate to polytunnel or glasshouse horticulture would mean the whole county was 10% self-sufficient in fruit and vegetables – a significant contribution to the resilience of local supply

- There are many ways of managing a CFE to provide a range of benefits:

    - A return on investment of 5%
    - Attracting innovative, entrepreneurial farmers
    - Contributing to multiple Council objectives from climate change to education and public health

- County Farms provide opportunities to new entrants that are not available on the private market

- There are holdings within the County and District Councils' land portfolios with the potential to be repurposed for food production

- There are alternative models to County Farms that could improve access to land for local food production, such as Community Land Trusts and FarmStarts

- New entrants need more than just land: they need routes to market, infrastructure and training or support

- Just one Oxford college owns enough land in Oxfordshire to produce over 50% of Oxford's vegetable consumption, or over 10% of the entire county's

- The Church Commissioners own enough land in Oxfordshire to produce more than twice Oxfordshire's annual vegetable consumption

- Just half a 5-a-side-football pitch per school in Oxfordshire could grow a portion of vegetables for every pupil each week

What does this report do?

This research focuses on how land might be made more accessible to promote a diverse, resilient, local food system in Oxfordshire. The report is structured around a series of actionable points (see Figure 1, below) to highlight ways the Council can move forward in collaboration with local enterprises.

The first chapter focuses on the County Farm Estate (CFE). It provides an overview of Oxfordshire's CFE and highlights how it could be managed to build the resilience of the local supply of fruit and vegetables. The report then presents a number of approaches for managing a county farm estate through case studies from other councils.

The second section then considers alternative ways that land can be made accessible to provide opportunities to grow food for local communities. It provides case studies of two projects, one based on land purchase and another on leasing land. This chapter also highlights some land in the County and District Councils' portfolios that provisionally appear suitable to be repurposed using these models.

The third chapter then considers other large landowners in the county and what opportunity costs these holdings represent. Some case studies of growing projects in Oxford are presented to illustrate the potential of accessing even small pockets of land by collaborating strategically with these landowners.

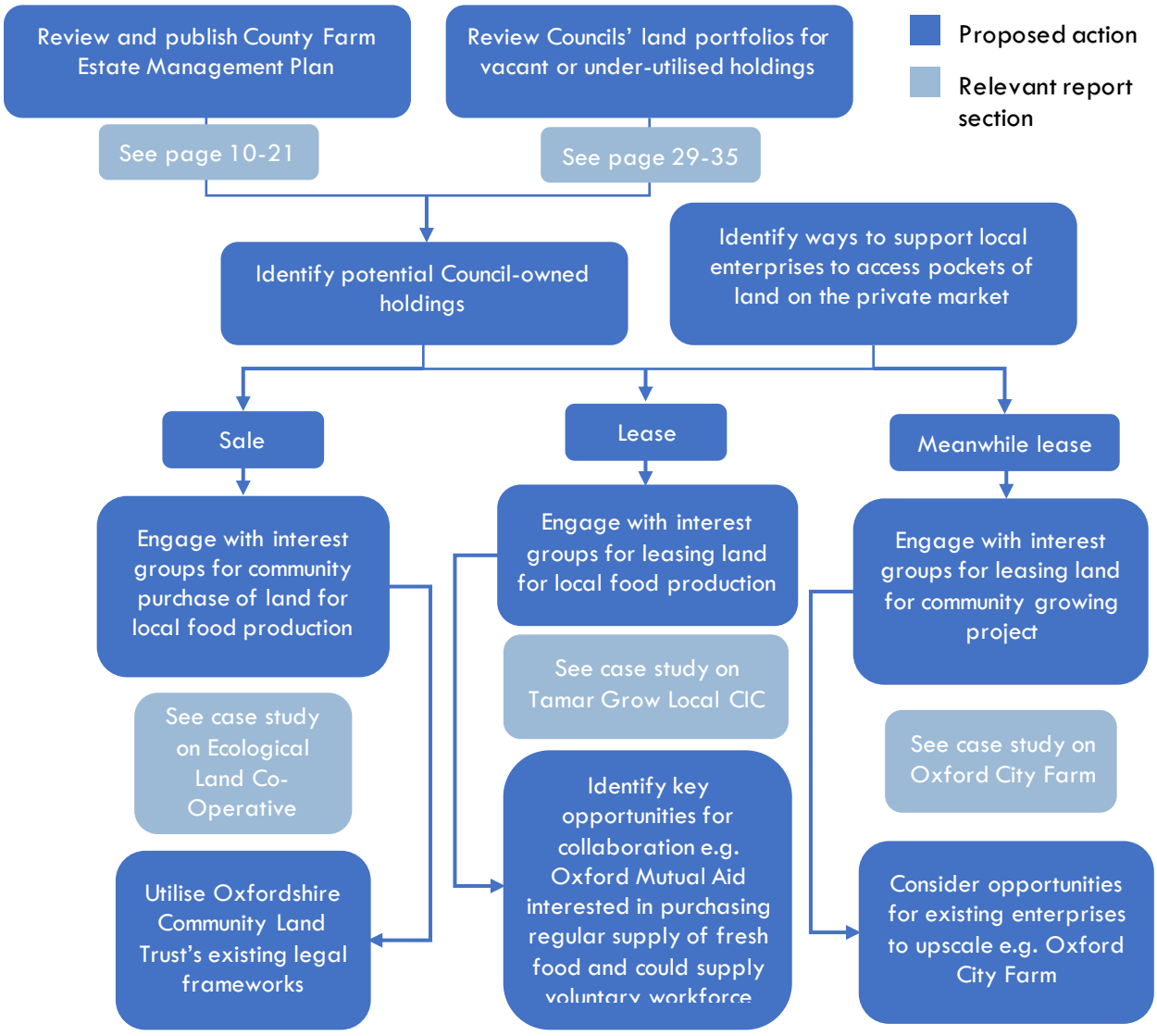


Figure 1: Schematic of proposed action points for the Council, indicating relevant sections of this report

What are the next steps?

This report initiates several processes indicated in the schematic in Figure 1. With engagement from the Council, this work can be built on to work towards increasing local food production. We propose that the next steps, in collaboration with the Council, would be to:

- Identify local authority policies and plans into which food production and access can be integrated (see page 7)
- Review the County Farm Estate management plan, considering synergies with other Council policies and strategies
- Consider the viability of restructuring the County Farm Estate:
    - to include more fruit and vegetable production;
    - to provide appropriately-sized starter and progression farms
- Publish a County Farm Estate Management Plan
- Consider potential of reallocating portions of landholdings identified in pages 29-35 for food production, e.g.:
    - by selling the land to a community land trust;
    - by granting a farm business tenancy to a CIC FarmStart;
    - by granting a temporary lease for a community growing project
- Engage with Good Food Oxford and other strategic partners to identify:
    - potential buyers/tenants;
    - existing frameworks e.g. Oxford Community Land Trust's legal frameworks;
    - potential opportunities e.g. Oxford Mutual Aid as a reliable route market;
    - established projects who may be interested in expanding e.g. Cultivate and Oxford City Farm
- Engage with other key landowners to explore further opportunities for local food production

An important outcome of this report is that land alone is not sufficient for building a resilient local food system. Attracting new entrants will require sufficient training and support, appropriate infrastructure and reliable routes to market (see Appendix 1).

Growing Local Veg: Synergies with current strategies

Oxfordshire 2030 Strategic Plan

- ✓ Healthy and thriving communities
- ✓ Environment and climate change
- ✓ Reducing inequalities and breaking the cycle of deprivation

World class economy

Oxfordshire Growth Board

- ✓ Healthy place-shaping in the wider growth agenda

County Council Corporate Plan 2020-2024: "Thriving Communities"

- ✓ Design places that encourage healthy and active lives
- ✓ Focus on the health gap between different communities
- ✓ Reduce carbon emissions to tackle climate change and improve air quality
- ✓ Encourage community-run services and self-help initiatives

Joint Health and Wellbeing Strategy 2018-2023

- ✓ A good start in life
- ✓ Living well
- ✓ Ageing well
- ✓ Tackling wider issues that determine health

Whole Systems Action Plan for Healthy Weight in Oxfordshire

Further opportunities

Oxfordshire Plan 2050

Sustainable farming practices to 'Protect Environmental Quality'

Local food for 'Strong and Healthy Communities' and to 'Support Economic Growth' in local communities

Opportunities for affordable rural housing

Oxfordshire Growth Board

Include land access for food growing in Local Plans

Develop a technical advice note (TAN) on growing spaces

Integrate food spaces into TANs on 'Green Infrastructure' and 'Sustainable Design'

Climate Action Plan

- ✓ Include food in the Plan

Work towards a Food Strategy that promotes a sustainable food system

Methodology

This was a mixed methods study aiming to identify opportunities for increasing food production in Oxfordshire to contribute to a more resilient food system.

The research can be broken down into two key components:

1. Analysis of data on land in Oxfordshire

Data was acquired by freedom of information requests from Oxfordshire's County and District Councils on their landholdings. This included the County Council's agricultural holdings, which was used to create an overview of how the County Farm Estate is currently managed. The councils' land portfolios varied in detail but were used to identify plots that could potentially be repurposed for food production. Criteria for selecting these plots were:

- Grassed areas, not forested
- Not a protected area e.g. site of special scientific interest
- Greater than 2 acres
- Or, if a town recreation site, greater than 10 acres to accommodate a small community project (e.g. 1 acre in size)
- Grade 3+ (or 4/Urban with evidence of agriculture directly adjacent)

In several cases, no precise location data (such as latitude and longitude or northings and eastings) were provided. In these cases, based on the location description and postcode, likely plots were identified and then, using the field boundary markings of a topographical map, the areas of the fields were measured. Those that agreed with the given acreage to a least 1 decimal place were assumed to be the site. Where precise location was given in the data set and acreage was not, the extent of the site was assumed from field boundaries and changes in land use evident in satellite imagery (e.g. grassed amenity land bordering on arable farmland). The agricultural grade of the land was determined using landexplorer.cc. If the recommendations of this report are taken further, detailed information on the plots would need to be confirmed by the Council.

2. Case studies from interviews

A number of case studies were compiled as a sample of ways to manage land in a way that reduces barriers to entry into farming. The sample is small and designed to illustrate a range of options. The case studies compiled were from:

- 3 County Farm Estates (CFE)
- 1 County Farm tenant
- 1 Community Land Trust (CLT)

- 1 FarmStart

CFE interviewees were selected from counties known to have management plans, rather than those focusing on selling the estate. Though not representative of CFEs across the country, these were best suited to provide examples of how an estate can be managed were a Council to choose to maintain it. The CLT and FarmStart, being a very small sample, were also selected not to be representative but to illustrate how such projects can be run.

The aims of the research were outlined at the beginning of each interview. The interviews were semi-structured, and the questions varied depending on the interviewee. Interviews with CFE representatives largely focused on:

- Whether the estate is considered a sound financial investment
- What the objectives and priorities are in how the estate is managed
- How the estate is structured (size of farms, number of tenants, etc.)

The interviews with the CLT and FarmStart focused on:

- The financial viability of the model
- The objectives of the enterprise
- The extent to which the enterprise is meeting its objectives

Three case studies were also compiled to illustrate projects ongoing in Oxfordshire, to highlight current opportunities and limitations. The interviewees were selected from:

- 1 city farm
- 1 community project, including food growing, on college-owned land
- 1 food growing project at a primary school

These interviews focused mostly on:

- how they accessed the land / what they pay for the land
- the objectives of the project
- what services they provide the community

Interviewees were selected based on prior relationships with GFO and, in the case of the project on college-owned land, as an example of collaborating with large institutional landowners in the county.

The County Farm Estate

The County Farm Estate: Key Findings

- There is sufficient suitable land in Oxfordshire's County Farm Estate to contribute significantly to the resilience of the local fruit and vegetable supply
- Currently, just 0.67% of the County Farm Estate (CFE) land is used to grow fruit and vegetables, including allotments
- Including allotments:
    - Over 5 times as much CFE land is used for horse pasture as for fruit and vegetable production
    - Nearly 70 times as much CFE land is used for arable as for fruit and vegetable production
    - Nearly 95 times as much CFE land is used for grazing and mowing as for fruit and vegetable production
- Oxfordshire overall produces a surplus of arable, so reallocating some County Farm arable land to horticultural production would increase resilience without increasing the land requirement
- Repurposing 8.3% of the county farm estate to polytunnel or glasshouse horticulture would mean the whole county was 10% self-sufficient in fruit and vegetables – a significant contribution to the resilience of local supply
- Case studies of other councils show that County Farms can be a prudent long-term financial investment for Councils
- County Farms can align with a multitude of Council objectives in regard to public health, climate change, education, rural economies, water quality and social care
- County Farms can provide opportunities for new entrants to farming that are inaccessible via the private sector

County Farm Estates

County farms were established at the end of the 19th century to create routes into farming (Graham *et al.*, 2019). By the 1920s, there were roughly 438,000 acres of county farmland (see Fig 2, below) (ibid.).

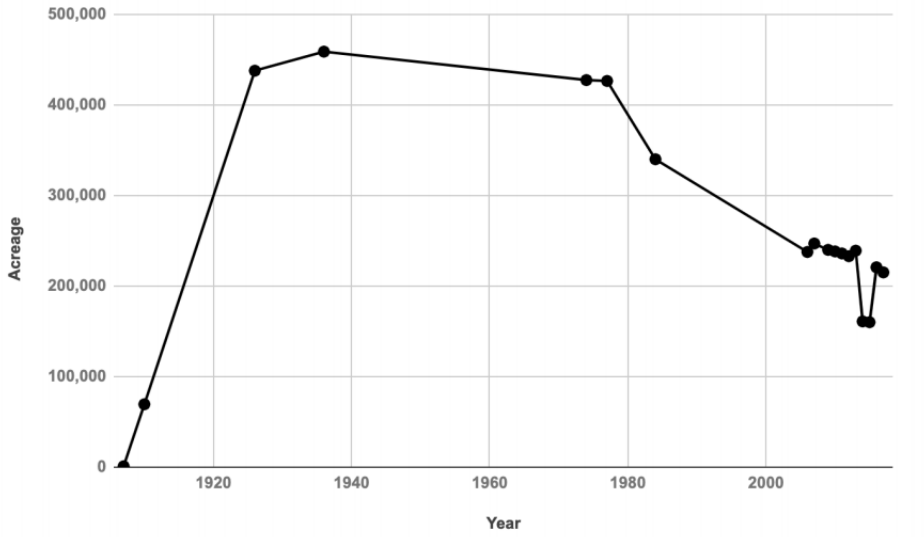


Figure 2: The rise and decline of England's county farms, 1892-2017 (Graham et al., 2019)

In 40 years, over 210,000 acres (more than 50%) have been sold (ibid.). Between 2010 and 2018, England's county farms estate declined 7% by over 15,000 acres, with 58% of this being sold between 2016 and 2018 (Hird and Shub, 2020).

Now covering 200,000 acres in England alone, county farms are a national public asset and remain an important mechanism for local authorities to assist new entrants into the sector. This has the potential to make local farming more economically viable, to encourage sustainable farming practices and to promote innovation in agriculture (Graham *et al.*, 2019).

This section considers how Oxfordshire's County Farm Estate is currently managed and identifies what opportunities the Council may be missing in terms of contributing to the resilience of the local food supply chain. Other management approaches are then illustrated using a series of case studies from different councils.

Oxfordshire's County Farm Estate

Opportunities for resilience

8.3% (54 acres) of the county farmland would need to be repurposed to polytunnel production or 152% (989 acres) to field vegetable production to have a significant impact on the County's resilience (10% of Oxfordshire's vegetable supply).[1]

Reallocating a portion of the County Farm Estate strategically to a combination of field vegetable production and polytunnels can have a significant impact on the resilience of local supply.

Oxford and Oxfordshire currently have a surplus of arable production, but a deficit in most other food categories, including fruit and vegetables (Curtis, 2013). Therefore, **a shift in arable to horticultural production would in itself represent an increase in self-sufficiency, with no extra demand for land.**

For diversification to have a functionally significant impact on resilience, at least 10% of supply would need to be locally sourced (Curtis, 2013). With Oxford's consumption of vegetables at around 24,000 tonnes per year and 3% of this already produced locally, to source 10% of this locally would require a further 1,680 tonnes. DEFRA's horticultural statistics put the average yield of field-scale vegetable production at roughly 7.7 tonnes per acre (DEFRA, 2020b). This means roughly 218 acres, or 34% of the county farmland currently leased out by Oxfordshire Council would need to be converted to field vegetable production to have a significant impact on the resilience of Oxford City's vegetable supply. Using DEFRA's statistics for protected vegetables at yields of roughly 136 tonnes per acre, only 12 acres would need to be repurposed to polytunnel or glasshouse crop production, or 1.8% of the estate.

1 Based on the data for the City's consumption (Curtis, 2013) and government statistics for the population of Oxford and Oxfordshire:
https://www.oxford.gov.uk/info/20131/population/459/oxfords_population,
https://insight.oxfordshire.gov.uk/cms/population

The latest disaggregated county farm data shared by DEFRA reported that Oxfordshire County Council was letting 352 hectares, or approximately 870 acres, of county farms in 2019 (DEFRA, 2020c). The data states that there were 33 holdings let to 27 tenants, only 2 of which were 'equipped', meaning that there are buildings (possibly including residential) on site. 26 are held under Farm Business Tenancies (FBTs), and one is a lifetime tenancy, meaning it must have been let prior to the Agricultural Holdings Act 1986 (ibid.). The latest analysis of smallholdings by size shows that in 2015, of 37 holdings, 33 were 20 hectares (roughly 49 acres) or below (DEFRA, 2016). In 2019, 7 new tenancies were granted and 6 terminated (DEFRA, 2020c); in 2018, 2 were granted and 2 terminated (DEFRA, 2019); and in 2017, 3 were granted and 3 were terminated (DEFRA, 2018), showing a steady turnover of tenants.

Oxfordshire County Council's own dataset of their agricultural landholdings shows a total of approximately 650 acres being let, across 31 sites. One of these is a track with negligible acreage, and is hence excluded from analysis, and two sites are adjacent and presented as a single acreage in the Council's data. Hence, 29 plots are presented in the following analysis. Of these 650 acres, roughly 412 acres are let for grazing or mowing, of which over 23 acres (nearly 4%) are used at least in part for horse pasture. 306 acres of the 650 are let for arable cropping such as wheat or beans (some combined with grazing), leaving a single holding of 0.78 acres for flower and vegetable production and 3.6 acres of allotments. That means **a total of 0.67% of the estate is used for horticulture.**

Excluding allotments, **the county leases over 30 times as much land for horse pasture as for vegetable production**, nearly 400 times as much land for arable as for vegetable production and nearly 530 times

as much grazing and mowing land. Including allotments, there is over 5 times as much horse pasture, nearly 70 times as much arable and nearly 95 times as much grazing and mowing land as horticultural.

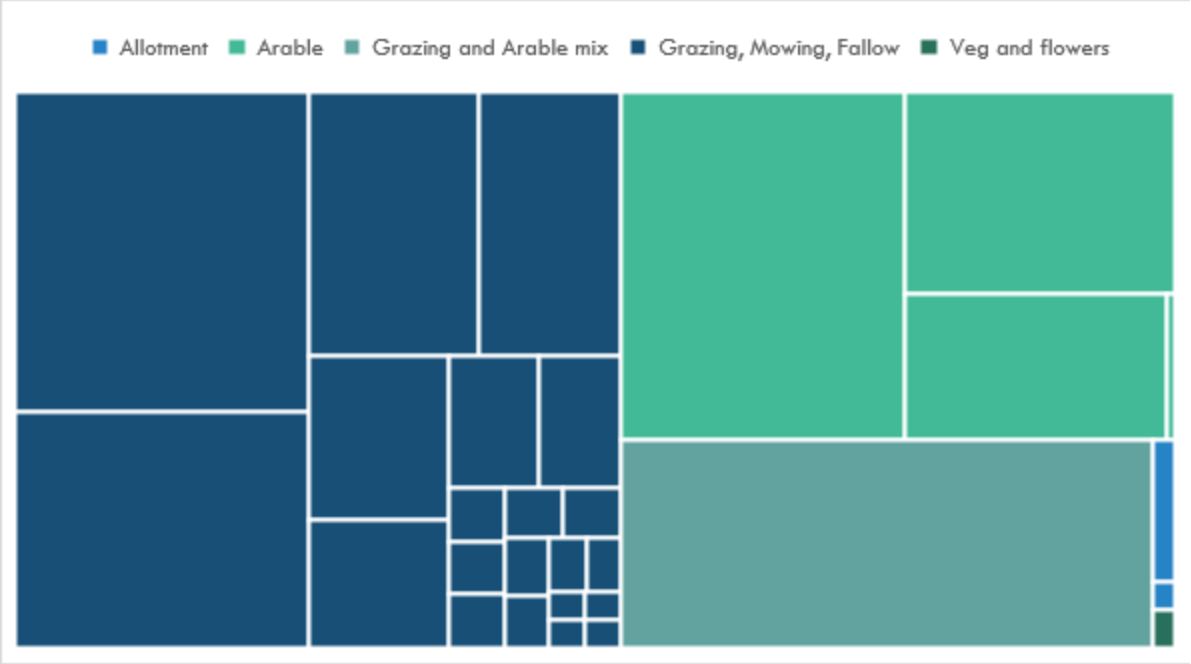


Figure 3: Oxfordshire County Farm Estate by Use

Of 30 holdings (leaving aside an access track with negligible acreage), 17 are below 5 acres, totalling approximately 33 acres. These 17 holdings include all 4.38 acres of allotments and flower and vegetable production, and approximately a third (by acreage) is dedicated at least in part to horse pasture. 7 holdings totalling 186 acres are between 10 and 50 acres in size (where 50 acres is the technical maximum size of a smallholding), and finally, there are 5 of over 50 acres, totalling 431 acres.

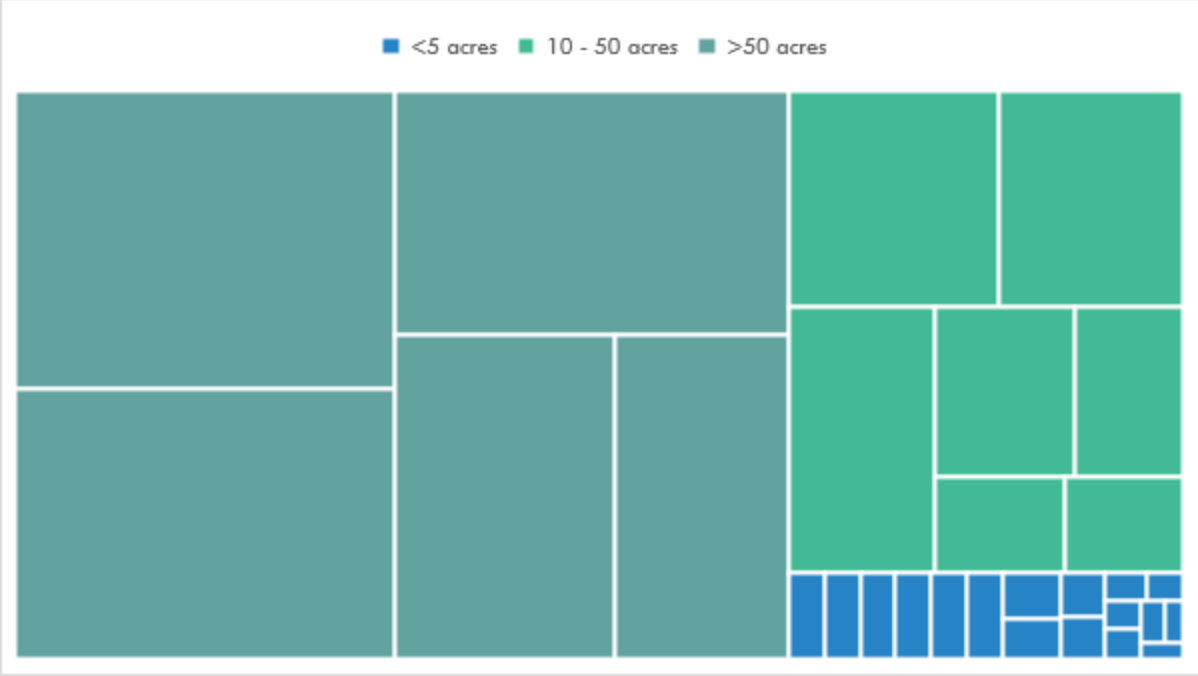


Figure 4: Oxfordshire County Farm Estate by Size

Case Study: Devon's County Farm Estate

- **Devon County Council see their County Farm Estate as a good long-term financial investment, with an estimated return of 5%**
- **There is a focus on supporting new entrants, and there is progression built into the system so new tenancies regularly become available**
- **The level of demand for county farms allows them to select innovative, sustainable, entrepreneurial farmers**
- **The estate meets multiple Council objectives including climate change, public health, education, rural livelihoods and water quality**

In 2010, over 36 stakeholders were consulted on the future of Devon County Council's County Farm Estate. All but one felt it was critical to retain the estate and to continue to provide the services for which it was originally intended; primarily, to support new entrants into farming. There has been no call to reform the Strategy put forward in 2010, which implies broad support.

There is a high level of demand for the county farm tenancies, attracting interest from across the country. The level of competition allows them to select exemplary new farmers – "the cream of the crop" – who bring innovation to the sector. A recently advertised tenancy resulted in over 40 genuinely interested people viewing the farm, with 21 applications submitted from across the South of England.

They feel this demand is the result of a number of factors, including:

- The security and certainty offered to tenants by promoting the Estate as a long-term asset to be held by the authority;
- A regular turnover of tenants, which provides a consistent stream of opportunities – this puts them on prospective tenants' 'watch lists';
- The flexibility offered by being able to apply for extensions to the tenancy;
- Sustainable rents and shared maintenance obligations provide a sense of fairness;
- The holdings are well-equipped and in good condition.

Devon's County Farm Estate constitutes over 9,500 acres of land, containing 65 holdings equipped with farmhouses and buildings. The estate is divided into starter farms up to approximately 120 acres in size and larger progression farms of between approximately 150 and 300 acres. Starter farms are offered on an initial term of 7 years, with the option of extending it another 7 given certain criteria in terms of competency and business viability are met. These tenants then have the option of leasing a progression farm on a 15-year tenancy, which can be topped-up if they did not utilise the full 7 years on the starter farm.

With more progression farms than starter farms, there is ample opportunity for tenants to progress within the estate. The County is seeing an increase in tenants moving from the starter farms on to private tenancies under institutional landlords such as the National Trust or the Duchy of Cornwall. These private tenancies can offer a larger acreage and longer tenancies, potentially for multiple generations. This progression is in-line with the vision of the County Farms Estate, who emphasise their role as providing routes into farming: they encourage tenants to move on into the private market, thereby constantly generating new tenancies and preventing stagnation in the sector.

The progression farms can provide an invaluable platform either to gain and prove experience on larger landholdings before progressing to the private market, or to build a viable business that could enable them to secure a mortgage for their own land. The progression farms also make the estate a more commercially viable asset: proportionately there are greater costs associated with small starter farms, their infrastructure and their maintenance.

Arguably, a greater return could be found were the financial value of the estate invested elsewhere. However, they highlight:

"This is a long-term asset. This isn't an asset here to just generate maximum income this year: it's about securing an appreciating asset, about generating a revenue return, and it's also about an investment in social, environmental output as well."

In 2019/20 the estate generated a revenue surplus of £464,000 and £1,569,062 in capital receipts – largely through the sale of small but high value areas of land for residential development. Overall, the combined 'financial return on investment', based on an asset valuation of £39 million is approximately 5%.

The estate does therefore provide a reasonable return on investment, and beyond that, provides a service that the County Council see as an important part of their function. There is flexibility, with some pockets of land with particularly lucrative planning permission being sold, but the Council supports maintaining the stock of land by purchasing land to replace plots that are sold.

Devon County Council have declared a climate and ecological emergency. The County Farms Estate provides an opportunity to explore sustainable farming practices like 'minimum tillage' that can boost carbon sequestration without losing productive land to forests. They find that the new entrants attracted by the County Farms tend to be more engaged in sustainability, efficiency and innovation, with the Council having to provide little encouragement for them to pursue less conventional, more agroecological management techniques.

The estate also collaborates with other departments and objectives of the Council, such as water quality initiatives, education, public health and rural entrepreneurship. Farmwise is an interactive event for school children to learn about food and farming, which this year saw 14 county farm tenants volunteering to host demonstrations for 1400 children. Knight's Farm, a care farm on a county tenancy in Ottery St. Mary provides day-care services to individuals with a range of disabilities and social needs, all based around working on the farm. The local GP practice now refers individuals to the farm through social prescription. They have also been working with the Veterans Farm Able Foundation, to provide hands on farm-based therapeutic work sessions to military veterans. The estate has in recent years enabled tenants to sub-let vacant farm buildings to local businesses, which has seen some small local businesses rapidly grow, for example, a dairy-free ice cream business that has since supplied independent shops across the nation and gained a contract with Waitrose.

Case Study: Cambridgeshire's County Farm Estate

- **The Council see the estate as a good long-term asset, with a considerable financial yield when land comes up for development.**
- **They are working towards a reliable return of 4% through diversification**
- **The estate are focusing less on creating opportunities for new entrants, but work closely with their tenants to help their businesses progress**
- **They are also using the land to help meet their climate change commitments**

In 2019 Cambridgeshire let 13,019 acres of County Farm holdings (DEFRA 2020) - the largest of any County Farm Estate. Of this, 10,997 acres were equipped, meaning there are farm buildings (possibly residential) on site. The latest data disaggregated by size of holding shows that of the 312 holdings at the time, 132 were below 20 hectares (roughly 49 acres), 51 were between 20 and 40 hectares, and 129 were above 40 hectares (roughly 99 acres).

Cambridgeshire recently reviewed the policies of the farm estate and decided to set a new direction. Three options were considered in the review: business as usual, wholesale disposal of the estate, or retaining the estate and looking for opportunities to sell, develop and diversify. The second option was appealing to many as the financial return on the estate is lower than would be expected of other investments. However, they decided to pursue the third option of retention and diversification, with plans to increase income to a reliable 4% yield. They also introduced an ambitious programme that aims to find replacement land to purchase if holdings are sold.

The respondent stated that:

"I personally think I would recommend every council having a large rural portfolio."

The returns are not as appealing as other investment opportunities, but there is considerable capital income potential if a large part of the estate comes up for development. The large size of the estate is accredited to a historical interest in encouraging new entrants into farming:

"We felt it was an integral part of our obligation to provide education, skills and learning."

It also reflects the high grade of much of the land in the county, it being located in East Anglia, known as "England's breadbasket". They felt that this made them well-placed to encourage people into farming, and it was therefore prudent to retain the estate over the decades as other counties sold theirs.

New entrants are now less of a priority. The way farms are structured throughout the county still lends itself to this, so they do not discourage it, but this is no longer a priority in how the estate is managed. Some smaller holdings have been amalgamated into bigger farms, as this was found to be more sustainable and financially viable for modern farming techniques.

Cambridgeshire County Council charge market rents on the land and have an independent assessment evaluation done on every piece of estate when it becomes available. The respondent said:

"we try to make sure that there is no feeling that we are just a landlord to them; we are very much in partnership with them and their success is absolutely of paramount importance to us."

As such, if subsidy payments are delayed, the Council will postpone rent payments for their tenants. Likewise, rents have been rescheduled where tenants have struggled with maintaining an income through the COVID-19 crisis.

The council work closely with the tenants, help them to compose business cases and lend tenants money at a reasonable interest rate, with payments spread across the tenancy alongside rent. This close relationship gives the council confidence in the farmers' ability to improve their income, and thereby yield

better returns for the council. The council feels that they have good communication with tenants. They host regular fora with them and have a representative panel of tenants who meet with council officers in order to raise concerns and highlight opportunities as they come up. Their tenants tend to stay long-term, which the Council are happy with.

The diversification programme has been ramped up considerably, with a strong focus on the environment. The Council already have one 70-acre solar farm providing a significant financial yield and are currently building a second. There is also a project in the pipeline to use Council land to drill boreholes and build an energy centre to take a village off oil-based heating and onto ground-sourced heat pumps. Had the council had to buy this land, the project would not have been conceivable. The Council have made a number of pledges and policies for reducing their environmental impact and reaching carbon neutrality, and the County Farm Estate is important for these ambitions.

The emphasis on diversification does not just relate to climate outcomes. The council have also encouraged their tenants to make use of vacant farm buildings on their site by sub-letting to local businesses. A farm in Ramsey has also set up their own farm shop on site and are collaborating with other local businesses. For the most part, the farmers do not sell to the local market. There is some inertia currently in encouraging tenants to make significant changes or investments due to uncertainties around agricultural policies and payments post-Brexit.

Case Study: Norfolk's County Farm Estate

- **The Council see the estate as a valuable part of the local economy**
- **The Council are committed to maintaining the acreage of the estate**
- **New policies look to diversify the farms, to continue to encourage new entrants, and to promote enterprises that can provide other benefits, such as care provision**
- **The estate requires considerable investment, particularly as many holdings are equipped**
- **The estate consistently provides a financial return that covers the cost of school transport across the county**

Norfolk's County Farm Estate encompasses over 16,800 acres of land, much of it Grade 1 or 2, leased to 143 tenants. The Council are committed to keeping the estate to a minimum of 16,000 acres. Roughly three years ago, the Estate's procedures, policies, management structure and strategies for the future were reviewed, and the Council invested in property management systems with the aim of strengthening relationships between tenants and the Council. As such, the Estate is in a time of change and it is still early to measure the outcomes of the new policies.

Their new policies have included strong encouragement for the Care Farm sector, through which people struggling with mental health can visit farms to assist their recovery. This both meets the Council's duty of care and also helps to minimise money being cycled out of the Council. Rather than paying the Third Sector for this service, the Council can recover money paid into the farms through referrals via the rent on the land.

The Estate contains a mixture of farm sizes. The Council are aiming to have slightly larger farms – 350-450 acres – on their two larger estates, as they feel this is a good size for a farmer to be able to make a living. However, they also provide a large number of smaller farms to help new entrants access land. New entrants are started on a five-year tenancy and in their fourth year look at a business plan for either staying on or moving to a larger progression farm. If they move onto a larger site of between 350 and 450 acres, they are offered a 15-year Farm Business Tenancy in order that they have a reasonable period to make the business viable. The Farm Business Tenancies are not seen to be let at a true market rent – they tend to differ from open market prices.

The land is used predominantly for arable farming, given the high quality of the soils, and is farmed quite intensively. Many farmers grow wheat, barley and sugar beet for the national market. However, the land is put to many different uses including several market gardening enterprises, both new and well established. The Council are trying to create more diversity of land use in the new entrants so that, in ten or fifteen years, more entrepreneurial individuals will be advancing to the larger farms.

Many holdings are equipped and some have residential properties, though most farmhouses have been sold over recent decades. Several farm buildings are out of date and too small for modern machinery. Moreover, the residential buildings that are retained need to be raised to a minimum Level E of energy performance. Consequently, the Council will be investing in the properties considerably over the coming years to bring them up to date. Nonetheless, the County feel it is a good investment: it is typically seen to cover the cost for school transport for the entire county.

Norfolk's economy is based on agriculture. Norwich is far from other large cities, and so there is not a large population commuting out of the area: the economy is therefore also quite localised. The County Farm Estate played an important role in re-settling veterans of the First World War: a legacy they feel is still felt strongly in the local community:

"it still means something to be a county farms farmer."

Case Study: Lived Experience of a County Farmer in Somerset

- **County Farms provide opportunities for new entrants not available in the private sector**
- **Different management styles and liability arrangements can create barriers or financial burdens for tenants**
- **Short starter tenancies can disincentivise tenants from investing in infrastructure or sustainable farming methods**
- **There is no guarantee of a local market for county farm tenants**
- **Even in the case that the Council is not interested in maintaining an estate, having a tenant farmer can be a mutually beneficial arrangement until a commercial buyer has been found**

In 2010 Ollie White had the remnants of a family farm - 22 acres in total - and a full-time job. Determined to start a regenerative farm of pasture-raised livestock, he set up a business rearing geese to sell at local markets but struggled to find demand. He knew he needed a wider audience but wanted to sell direct to make his business viable, so, within the first year, he launched a website, adding beef and lamb to his offering and providing nationwide delivery.

Ollie had applied to tenancies within the Devon County Council Farm Estate but found that at that time they had specific requirements for management that did not satisfy Ollie's interest in regenerative agriculture. In 2014, Somerset County Council advertised a tenancy on a County Farm, amidst a significant restructuring and sale of the Council's landholdings. Given their active policy of selling their holdings, they had less specific requirements. Ollie only had to speak to an agent, rather than appealing to an entire panel. Fortunately for him, and despite fierce competition from another 64 applicants, the agent shared Ollie's passion for regenerative agriculture and he secured the letting. This increased his landholding to 150 acres.

In the private sector, Ollie explains, he would have had to bid against experienced farmers, possibly with other well-established farm businesses and proof of profitability. The County Farm bidding process was only open to new entrants, and the bidding was based on the quality of the proposal rather than the amount of rent they could pay. The council, he said, wanted tenants seeking "new opportunities" rather than just "farming commodities".

Whilst the lease was more affordable than what Ollie might have secured in the private market, the previous tenants had been a dairy that went bankrupt. Ollie was obliged to invest heavily to renovate the house and erect 14 kilometres of stock-proof fencing. He feels that, on the private market, some renovation work would likely have been undertaken by the landlord. Considering the two years it takes to raise cattle for beef, this was significant capital investment long before the business was making returns. Nonetheless, Ollie built a very successful business.

The original tenancy was agreed for 10 years, with no right to renew. Tenant farmers are often faced with the dilemma of investing heavily in infrastructure that they will have to walk away from, or settling for not investing in the first place. Ollie would have been interested in exploring agroforestry - a method that builds soils and sequesters carbon - but could not justify the investment without long-term security. Rented farms, he says, are few and far between, and are often arable units. Livestock farms require houses and fencing, and as such are difficult to come by. Insecure tenancies and small margins, he suggests, prevent farmers from innovating and investing in the land, leading to a sector with an average age of 60, struggling businesses and degraded soil.

Fortunately for Ollie, the council is prepared to sell him the house and farm buildings, which they have come to view as a maintenance liability. They are planning to bank the land for future development, and so have offered Ollie to extend the tenancy for another 10 years. He highlights that this is a peculiar and very fortunate situation. A more active County Farms Estate would likely move him on to allow another new farmer to set-up, either to a county progression farm or to the private sector. It was, however, simply good fortune that the Council did not immediately sell the land for development.

Ollie recently built a farm shop on the farm, to connect more with the local community. However, the majority of his sales continue to happen through his website. He explains that the website is an extremely effective and efficient sales tool that allows him to spend more time on the farm. Sales, he explains, is like a second business, and the website allows him to focus on being a farmer first. His interest in selling direct meant he never worked with restaurants or wholesalers, and therefore did not lose business during the COVID-19 crisis but rather saw demand increase.

Alternatives to County Farms

Alternatives to County Farms: Key Findings

- There are plots in the County and District land portfolios that could be potentially reallocated food production
- Land itself is not sufficient for food production: infrastructure, training, and routes to market are also required
- There exists a model for CICs to rent land at market value, segment it into smaller plots that are affordable and suitably equipped for new entrant farmers with routes to market and training provision
- This model can contribute to the resilience of the local food system in times of crisis
- Community Land Trusts (CLTs) are a successful model for purchasing land to be held at an affordable rate in perpetuity
- The CLT model can be used to create affordable, equipped plots for ecological agriculture

Alternatives to County Farms

The availability and cost of land are prohibitive to many new entrants (Landworkers' Alliance, 2019). County Farms are not the only means to overcome this barrier, and some of the alternatives are well-placed to assist new entrants in overcoming other barriers to entry, such as the need for infrastructure, training and support, routes to market, and a home near their land.

These models tend to be based on renting or buying land at market price, and then subdividing the land into smaller plots. The model of ownership and what they provide can vary considerably between models, but this first step can be vital in making smaller packets of land available. A study by the Landworkers' Alliance has shown that smaller farms have the potential to be considerably more productive than large farms (Laughton *et al.*, 2017). The study also suggests that they rely less on subsidies than larger farms, with only 22% of the sample receiving any subsidy (ibid.). This sample also suggests that they provide more employment per acre than the UK average, and are potentially more resilience by virtue of being diversified and having low waste and minimal inputs (ibid.).

The following case studies provide examples of two different approaches to sourcing land for food production on the private market, which both create opportunities for new entrants to start farming.

Case Study: Ecological Land Co-operative

The ELC are a well-established and expanding enterprise, with a core motivation of keeping land affordable for ecological agricultural uses by holding the land in trust. They purchase land at market price, subdivide it into smaller plots, construct vital infrastructure and arrange temporary planning permission for tenants to build homes on-site. Their first project has now successfully transferred to permanent planning permission, and the original tenants remain on-site, running successful enterprises. They have a number of other sites, and their financial model is constructed to keep purchasing new sites to continually increase opportunities.

The Ecological Land Co-op (ELC) is a Community Benefit Society set up in order to improve access to land for sustainable use. Identifying the lack of affordable land and rural housing as barriers to entry for new entrant farmers, the land trust offers parcels of land at affordable rates in perpetuity in order to promote sustainable rural livelihoods that protect the environment.

The ELC is a multi-stakeholder co-operative with three types of membership:

- Investor members
    - Receive interest on their investment capped at 3%
    - Many choose lower returns to further support the Co-op
    - Share 25% of the voting rights
- Worker members
    - Employees and volunteers working at least 15 days a year at an ELC site
    - Share 25% of the voting rights
- Steward members
    - Ecological land managers
    - Principally for ELC smallholders but other ecological land users can apply
    - Share 50% of the voting rights

In 2015, their community share offer raised £340,000. The ELC also raise funds through institutional loans – primarily for land purchase – which are paid back upon sale, and through grants for particular items such as farm infrastructure.

They offer three models of tenure: either a larger up-front premium, followed by small service charges, which allows the ELC to immediately reinvest in future sites; a 25-year investment scheme with a smaller premium and the remainder paid in monthly instalments; or an ongoing monthly charge – the most accessible option, which provides ELC with long-term income. The following table highlights approximate pricing for a 6-acre plot with the ELC.[1] For comparison with their figures, they state in their business plan that a 5-acre plot with planning permission will usually sell for upwards of £225,000.[2]

Item	Outright Purchase	Rent to Buy
6 acre plot	£116,000	Initial Down Payment (20%) £23,200
Monthly Payment *EXAMPLE ONLY – The actual rent will be calculated based on the final purchase price of the lease for each plot.*	£0	£430* for first 5 years £650 for 20 years £0 after 25 years
Annual Costs – monitoring fee and insurance	Starting at £450 per year – with an annual increase linked to the CPI inflation rate	Starting at £450 per year – with an annual increase linked to the CPI inflation rate
Smallholder support fee	£650 annually reducing to £0 over 10 years	£650 annually reducing to £0 over 10 years

[1] https://ecologicalland.coop/join-elc-as-an-ecological-farmer/faqs/
[2] https://ecologicalland.coop/sites/ecologicalland.coop/files/ELC%20Business%20Plan%20Update%202017-2020.pdf

Greenham Reach

The ELC's first site was at Greenham Reach in Mid Devon: 22 acres of Grade 3 bare land purchased in 2013. They offered 3 plots of between 5.5 and 8.5 acres, and also:

- Secured 5-year temporary planning permission for low-impact housing for each smallholder,
- Ensured there was road access,
- Constructed a shared-access internal track,
- Constructed a shared barn,
- Provided on-site renewable electricity generation,
- Provided water supply via rainwater harvesting infrastructure,
- Provided business mentoring from an expert for one year.

The ELC also provided on-going support with farm business planning, planning applications and grant applications which funded a bore hole, a wind turbine and a food preparation kitchen.

The plots were offered on rent-to-buy arrangements (150-year leases) at "somewhere around a sixth to a quarter of market value".[3] ELC retains the freehold of the site, to guarantee its affordability and its use for ecology and agriculture in perpetuity. The lower prices are facilitated by purchasing larger plots of land that are then subdivided, and by distributing infrastructure costs across the cluster of businesses.

The Management Plan for the site, for which the ELC is responsible, includes the following objectives:

- Maintain and enhance the landscape
- Enhance the existing ecosystem and biodiversity of the site
- Households must use significantly less fossil fuel and the site should aim to be an exemplar of carbon dioxide sequestration
- Animals should be managed to high welfare standards

The ELC monitors the site for these objectives, and yearly reports highlight considerable success in all areas.[4]

After the first 5 years, Greenham Reach successfully transferred their temporary planning permission to permanent permission. The three original businesses continue to run, comprising of herb and salad production, sheep and pig rearing, fruit tree propagation, a vegetable box scheme and a micro dairy of Golden Guernsey goats.

Going Forward

ELC also have temporary planning permission granted on a site in East Sussex, with two plots already allocated and being farmed. They currently have two further planning applications being processed by Councils and have recently purchased their fifth site. ELC applying for funding to create a toolkit for more local, independent enterprises to run similar models.

[3] https://ecologicalland.coop/sites/ecologicalland.coop/files/Annual_Audit_Greenham_Reach_2013-2014.pdf
[4] https://ecologicalland.coop/greenham-reach-smallholdings

Case Study: Tamar Grow Local

Tamar Grow Local (TGL) rent a parcel of land at market rates on a Farm Business Tenancy. They have subdivided this into smaller plots for new entrants and provide a number of other services such as infrastructure, training and routes to market. Their FarmStart is part of their much wider network of enterprises, which mutually support one another to make the whole system resilient. This means that the FarmStart can continue to operate, though it currently is not functioning in line with their planned budget. Their experience highlights the importance of adequate training, the importance of being embedded in an adaptable network, and the potential for collaborating with community and charitable groups in ways that can be stepped-up in times of crisis.

Tamar Grow Local (TGL) started as a CIC in 2007, initially to hold leases to land for an allotment site. Shortly after, they took on another site in Plymouth, and another on a 20-year lease at peppercorn rates on the grounds they provided a service to the community. At this stage, the enterprise was run by volunteers, so they secured lottery funding to create a full-time post as their workload grew. Over the next three years they created a network of community food businesses, started 28 community projects and businesses including allotments, field-scale vegetable co-ops, livestock co-ops, orchards, CSAs, beekeeping co-ops and an apple and juice co-op. TGL also set up a Food Hub, much like an online farmers' market, which is their main source of income. This Food Hub provides a route to market for over 60 local producers. The Food Hub has since absorbed the TGL CSAs, acting as a not-for-profit broker for primary producer, still passing on 85% of the retail price of products to the producers, and providing a more convenient access point for the consumer.

TGL also recognised the lack of small-scale growers. Despite a long history of market gardening in the area, attributed to the micro-climate and long growing season of the Tamar Valley, the sector declined dramatically through the second half of the 20th Century. TGL rented 12.5 acres from a local landowner on a ten-year Farm Business Tenancy at market rate, subdivided this into 1-acre plots, constructed a polytunnel on each, and sub-lets the plots on one-year FarmStart tenancies. By leasing a larger plot, TGL are able to pay £150/acre for the land. For the first three years, they sub-let at £500/acre per year to pay for the tunnels, after which time the rent drops to £300/acre. This price is equivalent to market rent, but with several benefits aside from the polytunnels, including:

- Rainwater-harvesting infrastructure
- Off-road parking
- Electricity
- Ready access to TGL's routes to market
- Access to an Environmental Health approved kitchen, equipped for adding value to farm produce, at £3/hour

TGL emphasise that providing land and infrastructure limits some of the risks faced by new entrants, but that alone this is not sufficient:

"*you need to have the rest of the support structure in place. Just having access to land isn't enough*."

Key to this is providing a route to market, facilitated through TGL's Food Hub but also by their 'Grow, Share Cook' project. Initially funded through Plymouth City Council to provide free vegetables and cookery classes to 100 food insecure families each fortnight, the project has undergone some changes in funding and now provides food to people recently diagnosed with diabetes to try and address cooking habits. TGL also supply 3 months of free vegetables to new tenants of a Housing Association in Plymouth.

TGL are still subsidising the FarmStarts quite considerably through the revenues of the Food Hub. Despite these unanticipated costs, they continue to offer FarmStart tenancies because they feel it is important to provide low-risk, accessible opportunities to new entrants, and have a wider organisational structure that can facilitate it. The extra costs are the result of having a quicker turnover of tenants than they had budgeted for, roughly 50% each year. TGL have to clear up the plots between tenancies – a task whose costs often exceed the small security deposit paid by the tenants. TGL do not want to increase this deposit, as they do not want to create barriers to entry for new tenants. They require tenants to have allotment growing experience as a minimum, and most claim to have prior experience with, for example, box scheme businesses, yet many are unrealistic about what can be achieved in their first year, fail to plan adequately, and become demoralised.

Training for FarmStart tenants was budgeted for by TGL. However, despite various attempts, tenants mostly turned down the offer of training. TGL are now hoping to offer a City and Guilds qualification relevant to FarmStarts, currently being run by OrganicLea and now being taken up by the FarmStart Network. They believe this will be more successful because the qualification requires the prospective tenants to work on a demonstration plot or alongside an existing grower on a part-time basis and be assessed on their work. Unlike previous efforts to provide training, this model is more akin to accredited work experience rather than sending tenants "back to school" after they have already acquired a plot of land.

Resilience

Most of TGL's constituent enterprises have the capacity to be autonomous should any of the other initiatives fail, but they are all linked and thereby able to provide mutual support to sustain the wider network. For example, the TGL community growing projects are under no obligation to use TGL's routes to market but can choose to use them to make use of their customer base and distribution infrastructure. Moreover, "if a community initiative ends its resources can be readily recycled into a new initiative within the same niche, thereby continuing the purpose and objectives of the larger scale system."[5]

At the start of March, TGL had about 80 Food Hub orders per week. During the COVID-19 lockdown, they were able to scale-up to handle 300 orders per week. Importantly, they were able to redirect produce from some of their larger producers who had lost customers in the hospitality sector. They also acquired funding to deliver fresh fruit and potatoes to school children, and started cross-trading with Exeter Food Hub and Dartington Food Hub, which operate on similar principles. TGL regularly supply fresh vegetables to the food bank and supplied extra food parcels to the Housing Association for their COVID response, based off their pre-existing relationship.

TGL have recently secured funding for using their experiences to train other enterprises and are already in discussion with the Oxford-based enterprise, Cultivate.

[5] https://sharedassets.org.uk/wp-content/uploads/2018/01/Tamar-Grow-Local-Case-Study.pdf

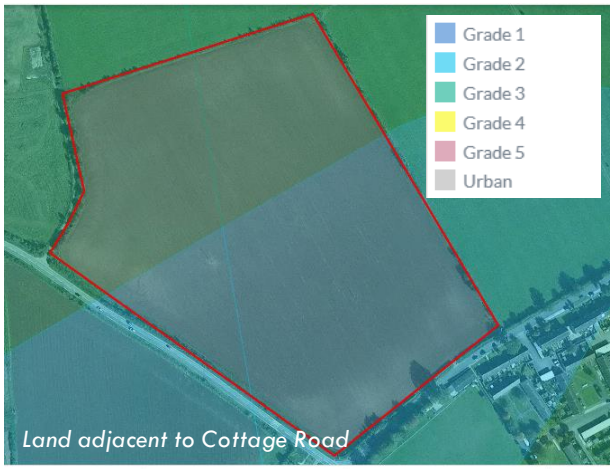
Potential opportunities in Oxfordshire

Oxfordshire's County and District Councils also have large portfolios of land besides the County Farms Estate, which could provide opportunities for local food production. Below are a number of sites from each council's landholdings, identified as potential sites for further investigation. Pending further information from the Council on the status of the plots, these could be considered for repurposing using a model from the case studies on pages 24 – 27. Many serve a recreational purpose in which case this report proposes only a part is reallocated for food production for the local community (e.g. 1-2 acres, depending on the size of the plot).

County Council

These data lacked precise location data, so holdings were identified based on description, postcode, and area provided in data using field boundaries marked on topographical maps. Black text in the table are from the original data set and blue text has been added by the author.

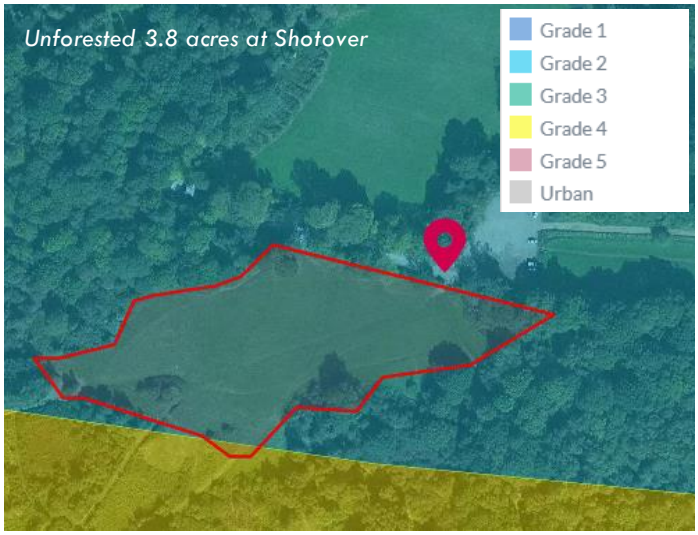
Site Name	Street	Postcode	Category	Site Use	Site Area (ha)	Acres	Grade
Land Adjacent to Cottage Road	-	SN7 8NB	Countryside Recreation	Countryside Recreation	7.94	19.62	2 and 3
Land Adjacent to Iffley Mead School	Augustine Way	OX4 3DR	Land Only	Grassed area	2.01	4.97	Urban



Oxford City Council

These data lacked precise location data, so holdings were identified based on description, postcode, and area provided in data using field boundaries marked on topographical maps. Black text in the table are from the original data set and blue text has been added by the author.

Address	UPRN	Category	Size (Acres)	Use	Grade	Notes
Elsfield Way, North Side, Agricultural	200004678695	Countryside Recreation Area	9.97	Park and open space	2, 3, 4	Insufficient data to locate site
Southfield Golf Course (part)	100120846823	Miscellaneous	30.16	Golf Course/ Allotments	Urban	Potential to reallocate a small parcel or extend allotment space
Shotover Country Park (Johnsons Piece)	10012800959	Countryside Recreation Area	31.66	Country Park	3	Potential unforested plot of 3.8 acres



Oxford City Council – Town Recreation Areas

The following town recreation areas – all greater than 10 acres in size – are potentially large enough for small community growing projects (e.g. 1 acre) to have a minimal impact.

Address	UPRN	Category	Size (Acres)	Use
Sunnymead Park RG	200004682146	Town recreation Area	17.49	Park and open space
Blackbird Leys Park	200004681017	Town recreation Area	12.66	Park and open space
Botley Park RG	200004678208	Town recreation Area	11.91	Park and open space
Cutteslowe Park RG	200004678694	Town recreation Area	75.49	Park and open space
Florence Park RG	200004681326	Town recreation Area	20.05	Park and open space
Hinksey Park RG	200004676337	Town recreation Area	20.08	Park and open space
Bury Knowle Park RG	200004680116	Town recreation Area	16.03	Park and open space
Croft Road RG	200004678654	Town recreation Area	10.22	Park and open space

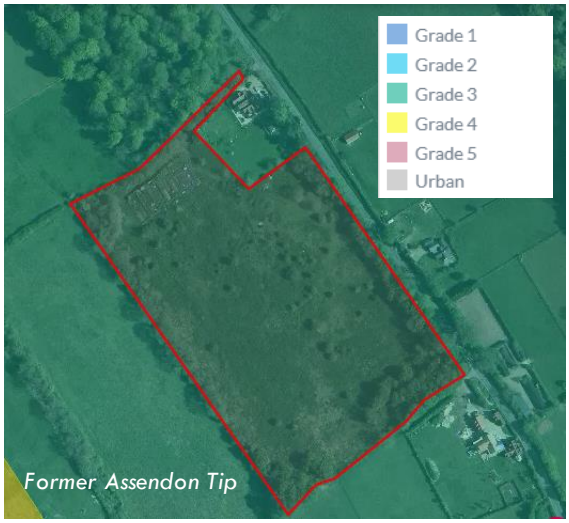
Land perimeters and acreages are presumed from field boundaries marked on topographic maps using the precise Northing and Easting data provided. Black text in the table are from the original data set and blue text has been added by the author.

Location	Town	Post-code	Easting	Northing	Tenure Type	Tenure Detail	Grade	Acres
Land at The Elms	Langford	GL7 3LB	424500	202400	Freehold	Owner Occupied	2	~12.1
Land at Chapel Close	Leafield	OX29 9NS	431100	215200	Freehold	Owner Occupied	3	~10.7
Land at Hewitts Close	Leafield	OX29 9QN	432200	215400	Freehold	Owner Occupied	3	~1.5
Land at Spring Lane	Idbury	OX7 6RU	4235002	219900	Freehold	Owner Occupied	3	~11.6

South Oxfordshire District Council

These data lacked precise location data, so holdings were identified based on description, postcode, and area provided in data using field boundaries marked on topographical maps. Black text in the table are from the original data set and blue text has been added by the author.

Location	Town	Postcode	Use	Area m²	Acres	Grade	Notes
Former Assendon Tip	Assendon & Bix	RG9 6AH	Land	36851.03	9.11	3	Possible contamination at site[6]
Adj 35/44 Mowbray Road	Didcot	OX11 8ST	Amenity Land	38240.66	9.45	2 and Urban	



[6] The minutes of Bix & Assendon Parish Council meeting held on 13th January 2020, http://bixandassendon.org.uk/upload/125434/documents/159E5A807E666262.pdf, (Accessed on 23/09/2020)

These data lacked precise location data, so holdings were identified based on description, postcode, and area provided in data using field boundaries marked on topographical maps. Black text in the table are from the original data set and blue text has been added by the author.

Location	Town	Postcode	Use	Area m²	Acres	Grade	Notes
Land South Of Tesco Stores	Abingdon	OX14 1TU	Land	27459.69	6.79	4	Adjacent to agriculture land
Land At Besselsleigh	Abingdon	OX13 5PZ	Amenity Land	98354.82	24.30	2 and 3	Insufficient data to locate site
Open Space North of Mably Way	Wantage	OX12 9BN	Public Open Space	60820.18	15.03	3	

Land at Bessels Leigh


Land North of Mably Way


Land South of Tesco Stores

These data lacked precise location data, so holdings were identified based on description, postcode, and area provided in data using field boundaries marked on topographical maps. Black text in the table are from the original data set and blue text has been added by the author.

Location	Town	Use	Area m²	Acres	Grade	Notes
Cassington Road open space	Yarnton	Parks	11,944	2.95	2, 3, 4	Insufficient data to locate site
Hanwell Park	Banbury	Parks	51,564	12.74	2 and 3	

Who Owns Oxfordshire?

Who Owns Oxfordshire?

The following section considers the key landowners in the County. It explores the scale of some of these landholdings and considers what they might represent in terms of missed opportunities for local food production. It then goes on to provide some case studies of projects in Oxfordshire that work with the local community.

Opportunities found on the private market, like those described in the previous section, offer huge potential as a supplement to County Farms. Oxfordshire has a number of large landowners who would be worth approaching. This is a double-edged sword insofar as there are obvious key institutions to engage, but they are difficult to approach and have well-established management strategies for their land portfolios. Several Oxford Colleges, for example, own large sections of Oxfordshire – as of 2015, St John's total property investments were worth £198,087,000, All Souls were worth £159,853,000, and Merton's were worth £116,790,000.[7] The Church Commissioners are another large landowner in the area, with their Islip, Bishopstone and Kelmscott Estates totalling 6,648 acres.

Discussions with various Officers within the Church over the course of this research have indicated that the Church Commission is a charitable entity separate from the Church who are obliged to prioritise profit in their management of the estate. The Diocese also own land, though there was mixed feedback as to the extent of their portfolio. The Diocese is under similar obligations to the Church Commission, but not as strict. Finally, Parishes also own land, though this apparently is rarely more than an acre or two per church and often only encompasses the churchyard and a car park. Nonetheless, some respondents at Diocese and Parish level did seem interested in exploring the idea of collaborating with communities to increase food production. However, the three-tiered structure makes it difficult to identify the appropriate gatekeepers to contact, and these efforts are on-going.

The simplest approach to collaborate with the church would likely be small, community projects at Parish-level. Community Food Networks were established in within Oxforshire's districts during the COVID-19 crisis, which could provide opportunities to link church land with community larders. There does seem to be potential for larger engagement at Diocese-level provided the proposal was seen as a sound investment.

[7] https://whoownsengland.org/2016/09/25/what-do-the-oxford-colleges-own/

What opportunities are we missing?

The following back-of-the-envelope style calculations illustrate the untapped potential of land in Oxfordshire. We recognise that the land is currently managed to provide income that the landholders rely on to maintain their operations and commitments to stakeholders. We are using these examples as illustrative of the potential within some of the larger landholdings around Oxford to diversify land use to fruit and vegetable production that could continue to generate income but equally meet the needs of the county to improve food resilience.

College owned land

Merton College alone owns 13,447 acres of land of which 1,727 acres are in Oxfordshire, according to a response to an FOI request in 2010[1]. The figure may now be larger according to other sources[2]. It is known not to be the college with the largest landholdings, but not all colleges have made this information publicly available.

Based on the governments statistics on yield for field-scale vegetable production, averaging in 2019 at roughly 19.1 tonnes per hectare per year (DEFRA, 2020b) or 7.7 tonnes per acre per year, Merton College's Oxfordshire holdings alone could produce over 13,000 tonnes of vegetables. Oxford's yearly vegetable consumption was found to be 24,000 tonnes per year (Curtis, 2013), less than double that figure.

Just one Oxford college owns enough land in Oxfordshire to produce over 50% of Oxford's vegetable consumption, or over 10% of the entire county's[3].

1 https://www.whatdotheyknow.com/request/landholdings_of_merton_college#incoming-95558

2 https://whoownsengland.org/2016/09/25/what-do-the-oxford-colleges-own/

3 Based on government statistics for the population of Oxford and Oxfordshire:
https://www.oxford.gov.uk/info/20131/population/459/oxfords_population,
https://insight.oxfordshire.gov.uk/cms/population

Church owned land

The Church Commissioners own 6,648 acres of land in Oxfordshire, spread across three large estates. Using the same yield figures as above, this land could produce over 51,000 tonnes of vegetables.

The Church Commissioners own enough land in Oxfordshire to produce more than twice Oxford's annual vegetable consumption, or nearly 50% of the entire county's.

Schools

If each school had just one allotment (0.125 acres), using the average yield of allotments in Oxfordshire of 10tpa[1], each school could produce 1.25 tonnes per year or 12,500 100g portions of vegetables. That's 240 portions per week – a ballpark figure of one portion per pupil per week. Just from one allotment. That's roughly 500 square meters, or half a 5-a-side football pitch. Moreover, if schools were able to group together to use a larger piece of land, they might be able to increase their yield per unit area.

Just half a 5-a-side-football pitch per school in Oxfordshire could grow a portion of vegetables for every pupil each week.

1 https://goodfoodoxford.org/wp-content/uploads/2014/02/Food-Printing-Oxford-Report-2013.pdf

Case Study: Oxford City Farm

Under-utilised urban spaces

Oxford City Farm provides an example of repurposing disused urban land to provide benefits to the community. As their model prioritises education and community outreach, they do not provide a model that contributes significantly in rent. However, the events of this year provided an opportunity to show the potential for upscaling production and has created links with local community food enterprises. They are interested in expanding the enterprise, given the necessary funding and support, which has the potential to contribute dependably to the local community food network. This model does not preclude other models being able to pay rent or purchase land at market rates, if they focused on productivity over community and education. Such projects could be run temporarily on stalled or under-utilised sites, much like the 'Stalled Spaces' project in Glasgow.[1]

1 https://www.glasgow.gov.uk/article/17878/Stalled-Spaces-Glasgow

Oxford City Farm is a 2.5-acre community-led farm in East Oxford. It aims to teach people to grow food and look after animals, and to create an appealing demonstration site to promote an alternative vision for agriculture that could be more resilient. The staff and volunteer growers at Oxford City Farm use organic and permaculture growing methods to create a highly productive garden without using chemical fertilisers or fossil fuel powered machinery. The Community Grower works with volunteers from the local community to share food growing skills and provide seeds, plants and support so that people in the area can grow some of their own food and be more resilient.

They do sell some of the food they produce, though this only contributes a small part to the income of the farm. Most of their food is fed to volunteers and donated to local community enterprises including Waste2Taste and an over-60s lunch club. In response to COVID-19, the growers decided to focus more on food production, and began to donate fresh product to Oxford Mutual Aid's Kitchen Collective, the Cowley Community Larder and the Food Bank in Rose Hill. They also took on two volunteers to help with harvest, distribution and managing orders. In August they produced 240 kilos of produce: a mixture of melons, courgettes, herbs, potatoes, beans, cabbages, carrots, peppers, chillies, and more.

A peppercorn rent is paid for the site, which used to be the grounds of a school. However, there are costs at the site, including paying 2.5 members of part-time staff, having the site connected to mains water and electricity, and transporting a portacabin that was being disposed of by a local school which they are now converting into a kitchen, offices, a meeting room and a shop area. For certain larger projects, they have successfully raised grants and donations, but they also receive income from regular school visits and Corporate Social Responsibility volunteering days. They are hoping to run cookery courses out of their new kitchen.

They would love to scale-up and to set up a Community Supported Agriculture Scheme. They feel that they could have a mutually beneficial relationship with a Mutual Aid Group, through which volunteers could be skilled-up on the farm whilst assisting the production of food for the group. To facilitate a more regular supply of produce, Oxford City Farm feel they would need funding to create more controlled growing spaces, such as polytunnels and glasshouses, and storage spaces to safely store vegetables to see them through winter and the hungry gap. They have land available for this but need more funding.

Case Study: Hogacre Common

Accessing college-owned land

Hogacre Common provides an example of a community project successfully accessing land owned by an Oxford college and repurposing it for the benefit of the community. It demonstrates, importantly, how this process can be opaque and reliant on having existing contacts in the right positions. However, it is useful to see that this is not without precedent and could perhaps be replicated to access strategic pockets of urban or peri-urban (perhaps marginal) land in the city to be repurposed for local food production.

Hogacre Common is a 14-acre Eco Park, run as a Community Interest Company (CIC). The site was taken on by West Oxford Community Renewables (WOCR) in 2010, and the local community has since developed a number of projects on the land.

The site was a disused sports field belonging to Corpus Christi College, who now share a sports field with another college. This meant the land was essentially surplus and, beyond this, is in Oxford's green belt and prone to flooding so is not prime for development.

An acquaintance of a member of staff at the college made the connection with WOCR, who then agreed to pay a jar of honey per year for a 5-year lease, which was later extended to 25 years. Hogacre are able to hire out the space to create an income to reinvest into activities with the community.

The first project was to plant 1000 deciduous trees to match the woodland around the site, for which they secured a grant of £75,000. They also planted a diverse orchard of heritage trees. Four tennis courts on the site have been converted into a community vegetable garden, OxGrow, which this year has supplied fresh vegetables to Cherwell Community Larder during the COVID-19 emergency response.

Hogacre run a number of community activities and are looking to increase this. They have already hosted sessions on hedge-laying, compost making and fruit tree grafting, and hold an annual harvest festival using produce from OxGrow. OxGrow also host a number of community events alongside their gardening sessions, such as art classes and exhibitions.

Case Study: Cutteslowe Primary School

Utilising spaces in schools

Cutteslowe Primary School have made use of otherwise waste land and a donated allotment site to engage their pupils with food production. The children have been able to grow, eat and even sell their own produce, alongside learning about the processes behind the food they eat. This provides an example of a simple and relatively low-cost intervention that requires no extra land but has engaged a local community in food production, and inspired many to grow food at home.

The Forest School at Cutteslowe Primary is open to all 315 pupils. During a weekly session across a six-week period, each child gets to learn about biodiversity, how to grow plants, and where food comes from. In what appeared to be an old rubble tip on the school site, the pupils and their Forest School Leader have created a wildlife pond full of frogs and tadpoles, an outdoor classroom, an edible garden and a home for chickens and pygmy goats.

Their edible garden, also known as a food forest, includes apples trees and plum trees and a shrub-layer of blackberries, raspberries and strawberries which the children get to take home or enjoy with their hot chocolate. The children have planted, grown, harvested, threshed and finally milled wheat into flour which they then took home to their parents, and have also baked cakes at school using eggs from the chickens.

"they're experiencing where things are coming from and how it tastes."

They also planted their own sunflowers and mint which they were able to take home.

"Lots of children have gone on to plant things in their gardens and inspire their parents."

Throughout lockdown, the Forest School Leader has heard a lot of feedback that pupils and parents have been growing food at home in their gardens.

They also have an allotment site funded by the Allotment Association in Cutteslowe Park, which the children get to visit during their six-week slot. They have grown beetroot, green beans, pumpkins, potatoes, leeks onions, carrots, and plenty more. In previous years (prior to COVID-19), the school would host a market stall at which children sold their harvest from the allotment to their parents:

"the children loved it and then there's a wider community getting involved."

Much of what they use is donated by the local community, such as seeds from local seed companies and wheat from a local organic mill. They have made use of what was otherwise a scrap piece of land.

"If you have a small area, anyone can do this."

Summary

- Oxfordshire's County Farm Estate (CFE) is comparatively small but has huge potential to be diversified by reallocating arable land to grow fruit and vegetables for local supply

- Currently, just 0.67% of the CFE land is used to grow fruit and vegetables, including allotments

- Including allotments:
    - Over 5 times as much CFE land is used for horse pasture as for fruit and vegetable production
    - Nearly 70 times as much CFE land is used for arable as for fruit and vegetable production
    - Nearly 95 times as much CFE land is used for grazing and mowing as for fruit and vegetable production

- Repurposing 8.3% of the county farm estate to polytunnel or glasshouse horticulture would mean the whole county was 10% self-sufficient in fruit and vegetables – a significant contribution to the resilience of local supply

- There are many ways of managing a CFE to provide a range of benefits:

    - A return on investment of 5%
    - Attracting innovative, entrepreneurial farmers
    - Contributing to multiple Council objectives from climate change to education and public health

- County Farms provide opportunities to new entrants that are not available on the private market

- There are holdings within the County and District Councils' land portfolios with the potential to be repurposed for food production

- There are alternative models to County Farms that could improve access to land for local food production, such as Community Land Trusts and FarmStarts

- New entrants need more than just land: they need routes to market, infrastructure and training or support

- Just one Oxford college owns enough land in Oxfordshire to produce over 50% of Oxford's vegetable consumption, or over 10% of the entire county's

- The Church Commissioners own enough land in Oxfordshire to produce more than twice Oxfordshire's annual vegetable consumption

- Just half a 5-a-side-football pitch per school in Oxfordshire could grow a portion of vegetables for every pupil each week

What are the next steps?

This report initiates several processes indicated in the schematic in Figure 1. With engagement from the Council, this work can be built on to work towards increasing local food production. We propose that the next steps, in collaboration with the Council, would be to:

- Identify local authority policies and plans into which food production and access can be integrated (see page 7)
- Review the County Farm Estate management plan, considering synergies with other Council policies and strategies
- Consider the viability of restructuring the County Farm Estate:
    - to include more fruit and vegetable production;
    - to provide appropriately-sized starter and progression farms
- Publish a County Farm Estate Management Plan
- Consider potential of reallocating portions of landholdings identified in pages 29-35 for food production, e.g.:
    - by selling the land to a community land trust;
    - by granting a farm business tenancy to a CIC FarmStart;
    - by granting a temporary lease for a community growing project
- Engage with Good Food Oxford and other strategic partners to identify:
    - potential buyers/tenants;
    - existing frameworks e.g. Oxford Community Land Trust's legal frameworks;
    - potential opportunities e.g. Oxford Mutual Aid as a reliable route market;
    - established projects who may be interested in expanding e.g. Cultivate and Oxford City Farm
- Engage with other key landowners to explore further opportunities for local food production

An important outcome of this report is that land alone is not sufficient for building a resilient local food system. Attracting new entrants will require sufficient training and support, appropriate infrastructure and reliable routes to market (see Appendix 1).

Bibliography

Curtis, T. (2013) *FoodPrinting Oxford: How to feed a City*. Available at: www.lowcarbonoxford.org (Accessed: 22 September 2020).

DEFRA (2016) *Sixty-fifth annual report to Parliament on smallholdings in England*. Available at: www.gov.uk/defra (Accessed: 23 September 2020).

DEFRA (2018) *Sixty-seventh Annual Report to Parliament on Local Authority Smallholdings in England*. Available at: www.gov.uk/defra (Accessed: 23 September 2020).

DEFRA (2019) *Sixty-eighth Annual Report to Parliament on Local Authority Smallholdings in England*. Available at: www.gov.uk/defra (Accessed: 23 September 2020).

DEFRA (2020a) *Food Statistics in your pocket*. Available at: https://www.gov.uk/government/publications/food-statistics-pocketbook/food-statistics-in-your-pocket-global-and-uk-supply (Accessed: 22 September 2020).

DEFRA (2020b) *Horticulture Statistics 2019*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/901689/hort-report-17jul20.pdf (Accessed: 25 September 2020).

DEFRA (2020c) *Sixty-ninth Annual Report to Parliament on Local Authority Smallholdings in England*. Available at: www.gov.uk/defra (Accessed: 23 September 2020).

Graham, K. *et al.* (2019) *Reviving county farms*. Available at: https://www.cpre.org.uk/wp-content/uploads/2019/12/December-2019_Reviving-county-farms.pdf (Accessed: 26 September 2020).

Hird, V. and Shub, M. (2020) *A Green and Pressured Land: making sense of the many competing demands for rural and peri-urban land.*

Landworkers' Alliance (2019) *How to Set Up a Farmstart: A handbook for establishing and running an incubator farm site*. Available at: https://landworkersalliance.org.uk/wp-content/uploads/2018/10/Farm-Start.pdf (Accessed: 26 September 2020).

Laughton, R. *et al.* (2017) *A Matter Of Scale*.

NHS Digital (2019a) *Health Survey for England 2018: Adult heath related behaviours*. Available at: www.statisticsauthority.gov.uk/assessment/code-of-practice (Accessed: 9 October 2020).

NHS Digital (2019b) *Health Survey for England 2018: Children's health*. Available at: www.statisticsauthority.gov.uk/assessment/code-of-practice (Accessed: 9 October 2020).

Oxfordshire Plan 2050 (2019) *Introducing the Oxfordshire Plan Oxfordshire Plan 2050 Regulation 18 Consultation (Part 1) Consultation Report*. Available at: https://oxfordshireplan.org/wp-content/uploads/2019/06/Reg-18-Part-1-Consultation-Summary.pdf (Accessed: 26 September 2020).

Willis, G. (2012) *From field to fork: The value of England's local food webs*. Available at: https://www.cpre.org.uk/wp-content/uploads/2019/11/From_field_to_fork___The_value_of_Englands_local_food_webs_interactive.pdf (Accessed: 26 September 2020).

Appendix 1: Theory of Change