



Creating lifelong learning pathways to a good food economy: education, skills and employment

By Natasha Stead

Produced in collaboration with the University of Sheffield, Regather and ShefFood



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The Institute for Sustainable Food

The Institute for Sustainable Food at the University of Sheffield finds dynamic solutions to the challenges of food security and sustainability. Our innovative research draws on the fields of science, engineering, social sciences, and arts and humanities.



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Regather

Regather is a co-operative of local people working to improve food and build community in Sheffield. We run an organic farm, veg box scheme, and many other community projects.



ShefFood

ShefFood is a cross-sector partnership of organisations across the city formed of local public agencies, businesses, individuals, academic and community organisations committed to working together to create a more sustainable food system for Sheffield.



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Foreword

With food systems responsible for around one-third of global greenhouse gas emissions (Nature Food 2021) and with agriculture recognised as the biggest threat to the estimated 86% of plant and animal species at risk of extinction (Chatham House 2021), it is now clear that the way we produce our food urgently needs to change.

Despite this knowledge, government continues to fail at every level, from global to local, to establish the appropriate policy frameworks for food system transformation. For example, COP27 was billed as 'the food systems COP', but focused narrowly on supply side agriculture issues dominated by global agri-food corporations, and failed to adopt a holistic food systems approach to include issues such as food waste and loss, nutrition, sustainable diets and resilient supply chains. The UK Government's dismal response to Dimpleby's National Food Strategy report represents another missed opportunity, greeted with dismay and disappointment, failing to give the challenges of food security and sustainability the urgent response that is required if we are to provide affordable, safe and nutritious food for all while living within planetary limits.

The many examples of government failure, at home and abroad, reinforce the importance of local action and innovation if we are to make our food systems sustainable and fair. To achieve food security, "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO 2009), we all urgently need to reflect on what we can do as individuals and communities to lessen the impact of the food that we eat on the natural world, to allow us to exist within the constraints defined by our Planet's limited resources. The COVID-19 crisis revealed the vulnerability of our food system, plunging people who never imagined that it would affect them into food insecurity, almost overnight. The global supply chains on which our current food system is based are fragile and this realisation has highlighted the need to develop our local and regional food production capacity to help mitigate these risks.

In 2022, Regather teamed up with the University of Sheffield's Institute for Sustainable Food to create a 'Local Food Systems Policy Accelerator' to develop evidence-based food system policy change in Sheffield. As part of the project, eight students were recruited to conduct original research into food system issues affecting Sheffield. The student researchers were asked to identify the mechanisms or 'levers for change' that can hasten the development of more sustainable food systems and infrastructure throughout Sheffield. They were given access to the assessment frameworks created



by Sustainable Food Places (SFP), to provide them with an insight into the multi-faceted world of food systems. SFP has previously granted Sheffield a Bronze Award, recognising the standards already achieved with the city. The work to achieve a Silver Award is underway, supported by the creation of Working Groups on specific subject areas within ShefFood, Sheffield's food partnership, and the creation of a Food Action Plan for Sheffield. This important work has in various ways been informed by the research undertaken and the evidence collected by the 'Local Food System Policy Accelerator' team.

We hope you find this report interesting and informative, and that you will join us in commending the student researchers responsible for making their time and effort available, and for contributing their skills and intellectual resources to tackling the critically important challenge of food system transformation.

Gareth Roberts, Co-Founder & Director of Regather

Professor Peter Jackson, Director of the Institute for Sustainable Food at the University of Sheffield



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1.0 Executive Summary

This report was formed in partnership with the University of Sheffield, Regather and ShefFood to help realise the desire of these key stakeholders to make substantial steps forward in modifying the Sheffield food system policy framework. In which a synthesis of evidence has been made from a variety of resources in creating lifelong learning pathways to create a good food economy, to help with background research for the chosen topic. Creating lifelong pathways can be described as having the means in place for farmers to set up their own businesses and be successful in doing so. The report is not only a product of collaboration but is a process for advancing research to be done as well with the farming and agricultural industry.

As a farmer, many shocks and barriers must be overcome to be successful, and this starts even before a farm is up and running. This report has identified this as a major flaw within agricultural practices and that more needs to be done to get more people into farming to make it economically viable. Currently, there are many overheads and a decrease in farmers which will leave practices like this to die out. And with modernists' agendas and the global market restricting the food system, this has created an abundance of issues e.g., food insecurity, unjust food systems, environmental problems, and long supply chains.

This report looks at the barriers farmers face then how FarmStart schemes are trying to overcome these with given case studies throughout the UK. Recommendations and conclusions will be offered on how Sheffield could do the same and how this can be improved through local councils and small/medium-scale farms/farmers working together. Allowing for more funding and grants. However, this is seen as very ambitious as agricultural practices have had many cutbacks over the years and only account for a very small minority. Therefore, this research will be used to add to another realm of research within the food system. To add to the many amazing achievements FarmStarts are already making within the UK.

2.0 Introduction

This report was the result of collaboration between the University of Sheffield Institute of sustainable food, Regather and ShefFood. All of which are playing a vital role in striving for solutions to the ongoing challenges of food security and sustainability.

The University of Sheffield seeks to understand the complexity that is the food system addressing issues from policy, communities to climate change, all aspects are covered. With an overarching goal of enabling a sustainable food network to flourish and become the new norm due to the world reaching its limit on feeding itself, especially with a growing population. More information can be found at: <https://www.sheffield.ac.uk/sustainable-food>.

Regather is a thriving community organisation of local people working together to improve the food system of Sheffield, contributing to a sustainable shared future. Regather incorporates a fruit and veg box scheme that delivers local seasonal produce to Sheffield. In 2018 Regather acquired a 15-acre farm situated in the Moss Valley on the edge of Sheffield. This now supplies the veg box scheme and supports the goal of creating a sustainable food network. Details can be found at: <https://Regather.net/>.

ShefFood is a cross-cutting partnership of stakeholders working together to create a more sustainable food system for Sheffield. They are committed to developing a more resilient sustainable food system whilst spreading awareness about environmental factors and allowing for communities to economically flourish. If you would like to find out more or get involved please visit <https://sheffield.org.uk/>.

All 3 organisations strive to build lifelong pathways for a good food economy which is defined as a diverse and thriving supply chain from farm to fork. This report builds upon this in how lifelong learning pathways can be created and are being created. Resulting in the continuing development of knowledge and skills that people experience after education. Examples of this include FarmStart which will be discussed later.

Already over 50 local authority areas across the country have well-established food partnerships and networks in place, working together to build a good food enterprise, create jobs, revitalise high streets and raise concerns on sustainability and climate change (Sustain,2021). And more can be done to build and support people to get into farming.

Creating lifelong learning pathways is hugely ambitious but important as food consumption has dramatically changed over the years. With an increasing population, there has been a need for the growth of agricultural practices to increase the productivity of food and meet demand. Especially within the UK, as farming practices are on the decline due to the globalised nature of the food system. And it is fair to say that food is often taken for granted, as food systems are built upon a complex, interdependent, and globalised network of connections and organisations. However, this unsustainable system contributes to climate change, depletion of resources and geopolitical instability, which sees producers getting paid a pittance for the food we eat. Therefore, change is needed, and it is needed now so local food systems can flourish and prosper, while giving people a chance to eat sustainably and healthily within their communities. Within Sheffield there are significant health inequalities, therefore the food system could be used to increase life expectancy and reduce obesity rates which are amongst the highest in England (Turner & Furness, 2012). This report will encourage more people to learn about their immediate food environment to talk about and get involved in growing their own food, bring neighbourhoods together and help people get into farming. Whether that is growing produce at home or setting up their FarmStart (Sheffield City Council, 2021).

This report will set out a pathway through the education system, to college or university, what barriers new entrants farmers face and how FarmStarts are paving a way to break down these barriers. All whilst showing how Sheffield is making steps forward in encouraging and educating those who may want to get into farming and agriculture as a career. Linking education to business will see local food systems and economies grow in abundance especially given Sheffield's rich diversity of culture, events, markets, and key partnerships within the city. And there are many anchor institutions and levers of change within the city of Sheffield that may help facilitate a farm start-up or business. Anchor institutions are those that have a large stake within the community of Sheffield and levers of change can be understood as an area of work that has the potential to make an impact on the local and surrounding area. Four examples of levers for change are governance, economy, individual and collective action, and technology. All can help and would help build a good food economy if all actors were to work collaboratively.

3.0 Methods

This paper fills a literature gap on how people get into farming as not much is covered, and it is seen to be a non-disclosed topic that has resulted in it being hidden and generally it is hard to find employment in the farming industry if you were not born into it. This research aims to bridge the gap between education and business in the food system by answering the questions:

- How can people get into agricultural practices?
- What barriers do new entrants face?

These questions are designed to bridge the gap between education and food enterprise and look at the forward-thinking role new entry-level and FarmStart schemes play in filling the gap of educating people to get into farming. The research will be collected from different search engines with the use of reports, websites, newspaper articles and other non-academic material. This has allowed for the retrieval of a multitude of data from a range of sources to support this report and different perspectives and experiences to be analysed.

4.0 Review of key sources

4.1 Importance of Creating Lifelong Learning Pathways

Food affects everyone, its affordability, availability, operations, consumption, and the waste it can generate. On average, Sheffield household waste accumulates to £50 a month on food. Equivalent to £600 per year per household, equating to £136 million a year across the whole of Sheffield (Veolia Sheffield, 2022). People so casually throw items away that they do not give a second thought about, with little regard for the natural resources and human ingenuity that have gone into its production (De Bellaigue, 2020). However, things can be seen to change already as more people than ever did buy local produce during the pandemic and support small businesses that may have been suffering. So now more needs to be done to tackle this as it is an ongoing rising issue. Covid 19 highlighted the fragility of food systems up and down the UK. And the fundamental weakness of long supply chains shows that change is needed (Soil Association, 2020). The need for a localised and resilient food system has never been clearer, growing new entrants increase the supply of agroecological grown fruit and vegetables and allow farmers to create viable and strong businesses (Wetherell, 2020). And this will, in turn, lead to greater opportunities for the development of the local food system, infrastructure and economy, allowing for smaller businesses to flourish.

The notion that the food system needs to undergo a comprehensive transformation has found widespread acceptance by many academics and one can come to the consensus that food sovereignty could be the answer. Food sovereignty is “the right of nations and people to control their own food systems, including markets, production, nodes, food cultures and environments” (Wittman et al, 2010:2). Food sovereignty is a huge issue in the UK, where only 64% of all the food eaten here is produced in the UK. Meaning that we are reliant on both imports and the global agricultural sector to feed the country and drive economic growth (Cousins, 2022).

And with more people than ever using food banks as a means of getting by amid and after various lockdowns, community growing and projects could help with this too, as food banks are a symptom of a broken system (Riches, 2020). With benefit delays, low incomes, rising bills and benefit changes there are now more than 19 food banks within Sheffield. Gaps need to be filled within local food infrastructure where communities are taught about local and sustainable produce creating a lifelong learning pathway. For example, Regather and delivery of fruit and veg boxes to the local community is a template for how to manage and coordinate the growth of home delivery of local food in an urban context. Many people are passionate about food and a sustainable food strategy, with organisations working together, can help harness this passion, delivering improvements in health, wellbeing,

environmental factors, and the local economy (Sheffield City Council, 2014). However, with farmers only accounting for 1.5% of the British population, and intensive farming practices destroying the land for higher yields, traditional agricultural practices can be seen to be coming to an end. Also, under the new agriculture bill subsidies will be redirected to delivering public goods alone and, if farmers do not provide these services, then they will have to live off the sales of their produce (De Bellaigue, 2020). Therefore, this makes it even harder for small farms and family-owned businesses to get started and earn a living. And with added pressures from covid and Brexit, this led to further hardship for small farmers, as incomes fell by 20% from £5.2bn in 2019 to £4.1bn in 2020 (Department for Environment Food & Rural Affairs, 2021). The Conservative government announced payments of £100,000 for existing farmers in 2021. However, it is uncertain whether there will be a new generation of farmers to replace them, as since 1990 the number of small farms has already dropped by 100,000 (Harvey, 2021).

Statements made concerning the New Entrants support schemes in November 2020 have been slow to lead to action. The pilot scheme has only just begun to be rolled out in 2022. “My Lords, we are working on a co-design with councils, landowners and others so that the new entrant scheme works precisely with county farms and local authorities. That is because, as I have said, we want that to be retained. This work is underway and will be co-designed in 2021, and we hope to roll out the programme in 2022. Not only are there county farms, but a third of the land in this country is tenanted and there are opportunities in the tenant farming sector as well” (UK Parliament, 2020). Farmers and people who want to get into farming need to be at the heart of policy changes, new bills and government considerations and must be properly recognised as they are the backbone of rural communities up and down the country. Farmers need to be well equipped and have the confidence and tools necessary to meet the rapid demand for regenerative farming practices (Windsor, 2021). Regenerative farming can be described as practices that address climate change and that do not have negative environmental impacts e.g. reducing the use of artificial fertilisers.

With an ageing farming population, low incomes coupled with a lack of support from government is accelerating the rapid decline of the farming industry. Governing bodies are already seen to not do enough: for example, Marcus Rashford’s campaign on feeding school children. In which, he called out the Government’s refusal to provide free school meals during the school holidays. This led to the FSM programme being extended into the school holidays. The government has time and time again failed our food system and there should not be a need for charitable organisations and social movements pleading with the government to bring about change; it should just happen in the first place. And with the failure of the Millennium Goals and Sustainable Goals more is needed to help farmers and help make sustainable cities and communities (Sustainable Development Goals, 2022). As of 2019, the world is not on track to achieving most of the 169 targets that comprise the Sustainable Goals. Transformative changes are needed, policies need to be modified and promotion of the goals needs to be adhered to (United Nations, 2019). So that lifelong sustainable learning pathways can be created for a good economy not only within the UK and Sheffield but the world as well.

Creating a vibrant prosperous and diverse sustainable food economy builds upon the cross-sector food partnerships already in place and the action plan to help implement a sustainable food network which has been progressively built upon over the last year. A good food economy provides sustainable, affordable, and healthy food that reduces the impact on the climate whilst celebrating and supporting the local economy. Every £1 spent on a local food business generates £3 in social, economic, and environmental value for local communities (Soil Association, 2020).

Developing a sustainable food network within Sheffield is a challenge, however with food plans, strategies, the National Health Service, local government, universities, businesses and community organisations working together, this can be achieved. Local food work continues to blossom, development of skills and community resources are flourishing, creating local employment and supporting local economies. There is a shared vision to build a prosperous and vibrant food economy resulting in a resilient sustainable food system for Sheffield. The work to link us as food consumers to producers is already underway (Cooke, 2004). For example, Regather created a community growing project adjacent to Lansdowne and Leverton Estate, where many experience deprivation, food insecurity and are economically inactive. This led to the teaching of practical gardening skills and allowed them to talk about foods' role in climate and biodiversity crisis (Regather, 2021). Also, in 2012 Sheffield city council established the Sheffield fairness commission intending to create a fair city. And they recommend establishing more schemes that are run by the local people for the local community, e.g. cooperatives, including grow, cook and eat projects (Sheffield City Council, 2021). However more needs to be done to overcome the barriers new entrants to the sector face.

4.2 Barriers

Many potential food producers are effectively locked out by several different barriers faced on entry to farming. Access to land is incredibly hard for new entrants to get hold of especially in an urban and peri-urban context. Land is expensive to buy and often totally out of reach. Rents on land can also be unaffordable and often come without any infrastructure, leading to further costs (The Landworkers Alliance, 2018). But depending on where the land is or what infrastructure is in place the price could even double. In 2015 the average cost of one acre of land was £10,067, as investment in land, seen as a safer asset, rocketed after the 2008 recession (Countryfile, 2017). Covenants and clawbacks are other factors that can restrict farmers (The Small Farm Life, 2019). Covenants place restrictions on what you can do with the land. Clawbacks are put in place by sellers, as should there be an increase in the value of the land over a certain number of years then the seller receives a share. These added pressures and costs are substantial barriers for new farmers. With capital costs the highest they have ever been, most farmers are the ones that are born into a farming family and who inherit farms from parents and grandparents, taking over when the older generation retires. Many farmers are already at retirement age as there is an ageing farming population, and most do not retire until they are in their 80s or 90s. Farms without a succession plan for a younger generation to take them on are likely to be lost for other land uses.

The cost of land coupled with inaccessible loans due to high costs and low returns makes farming a risky enterprise. Banks are cautious about lending money to businesses and consumers due to many uncertainties, e.g. Brexit, Covid19 and low confidence in the global economy (Rural Mortgages, 2020). Making it more difficult for small scale farmers and new entrants to start, as the risks associated with a small-scale farm is too high due to a low level of profitability. This is why many people start farms with inadequate equipment, and this affects the long-term viability and efficiency of farms as will be spoken about below (The Landworkers Alliance, 2018).

Long term viability within the farming sector is undermined by a lack of training, skills and mentoring, all of which can have significant impacts on the efficiency and resilience of farms to absorb shocks over the first couple of years. As it takes time for farms to break even and earn a living wage, agriculture is very risky. Outcomes are determined by external factors: Produce takes months to grow, and is dependent on weather conditions, so yield volumes and pricing are dictated by external factors over which there is limited control (Datar, 2018). Therefore, participants must have access to training to learn practical skills to grow to produce and set up a successful business. Providing people with the skills needed builds up the viability of being successful in farming and receiving a good income from their business. There is a lack of new entry starting points to get into farming, therefore, FarmStarts in turn will support independent and sustainable good food businesses, local jobs, livelihoods and boost the local economy. This will create jobs in a declining sector, especially for those employees who will experience barriers that have been stated above.

4.3 Learning Pathway

Due to the many barriers new entrants face, there must be a lifelong learning pathway open to those with a passion for farming. A route that is open to aspiring farmers so they can gain the relevant training and necessary skills.



Figure 1 shows a learning pathway for new entrants to get into farming. It goes through a multitude of stages of education, however, at any point, somebody can start working on a farm or set up their own business in farming. Therefore, this figure is not linear as changes may occur to anyone’s route into farming. This figure just sets out one pathway, from compulsory education up to FarmStart schemes. Each circle grows with more knowledge that is gained at each stage, showing the cumulative effect education can have on somebody’s skills.

Figure 1 - Model showing a learning pathway for new entrants into farming

4.3.1 Primary / Secondary Education

The education system and national curriculum are flawed in many ways. The national curriculum sets a framework for schools to follow that incorporates essential knowledge and skills. However, students are viewed as consumers of knowledge, and the education system is not often reformed to suit students' needs that support everyone equally (Meda,2020). Therefore, farming and where food comes from is not talked about in schools as it is down to the teacher's personal preference if they include this. Looking at the national curriculum at primary and secondary levels, farming is only mentioned within the context of history, not in today's society or how it is relevant for students to know where their food comes from. However, universities do build upon Ian Cooke's 'Farm to Fork' research and other areas within the food system with relevant social sciences degrees.

The National Farming Union has created farming stem enterprise projects which take children through each stage of setting up a farm, shop, and business. This teaches them to learn about budgets and even trial their own business to consumers, design recipes, learn knife skills, and calculate expected profit. Also taking into account sustainability as well, especially through packaging. This is a valuable resource that teachers can use from year 1 through to 6 and is a step in the right direction for farming to be incorporated into the education system and national curriculum. More information about the work the National Farming Union do can be found at: <https://education.nfuonline.com/stemterprise>.

Vital projects like this reveal complex everyday issues to children which are often left hidden, and children are fascinated by how much they did not know. So, changing food culture and the importance of where our food comes from is hugely important to children as people are concerned we have lost touch with the food system (Sheffield City Council, 2014). The national curriculum is biased towards academic achievement rather than practical skills. Showing children where food comes from and why farming matters brings home the complex, interconnected nature of the food system and gives children a lesson in real-life values (Powell, 2014). Food needs to be a key pillar for learning in schools, especially at a primary age so then students can grow up being inclusive and diverse in culture and the food we eat. This could change the trajectory of children's lives, with potentially profound effects on and beyond our food system (Pardoe, 2022). Even though the food system is global in scale, more could be done for children to learn about the food they eat, and support could be given from small to medium-sized enterprises to teach children the fundamentals of the food system, their diet, and the farming industry. For example, food growing could be taught from school gardens and window boxes, encouraging outdoor activities and learning about the world around us (Sheffield City Council, 2014).

Development Education Centre South Yorkshire (DECSY) has been an independent education centre promoting development in the curriculum since 1984 and works in collaboration with The Linking Network (TLN) in Sheffield and surrounding areas within South Yorkshire. The Linking Network builds

upon cross-cultural contact and community cohesion and aims to contribute to this at a local level. One idea which could be taken forward is working together with DECSY to produce food-related resources which explore the 4 key questions: Who am I? Who are we? Where do we live? How do we all live together? Thus, bringing together people of different backgrounds and celebrating diversity whilst educating children at a primary age level about the wider food system within Sheffield and surrounding areas. And the diverse food we eat from a range of different cultures. This would take a huge step forward in creating a forward-thinking initiative right at the start of the learning pathways focusing on children in primary and secondary schools. More information about DECSY and TLN can be found on their website www.decsy.org.uk and <https://thelinkingnetwork.org.uk/>.

4.3.2 Skills and Qualifications

Post-16 there are many educational options an aspiring student farmer can go down: apprenticeship, college, sixth form, volunteering. However, students need to make sure they try to gain maths, English and science. Although these subjects are not a requirement, they will help new entrants apply for useful qualifications further down their career path. There are also other skills needed to be a farmer: physical ability is key to meeting the demands of labour-intensive tasks. Practical skills will also be needed, as well as a willingness to work evenings and weekends too. Farmers need to allow for this flexibility, as they could be working long hours. New entrants also need to be self-motivated, enthusiastic and passionate about the work they are doing. Having some experience of working within a team, using your own initiative and communicating with different stakeholders provides new entrants with transferable skills that will help with running a farm business. Additional skills and qualifications can be gained at any of the different stages of the lifelong learning pathway that this report identifies.

4.3.3 Volunteering

If new entrants want to get into farming then it would be ideal to volunteer or get work experience from local farms that they may be interested in working at in the future. Also, seasonal work would provide useful work experience too: such as farmworker, livestock worker or fruit picker, demonstrating the skills needed to work on a farm and whether it is the right job for new entrants. Also, there are many worldwide opportunities where people can volunteer as farmers and learn agricultural skills and practical skills on organic farms which provide free board and room for someone to help out - an amazing opportunity to start a career in farming. More information on this can be found at: <https://woof.net/>

Local councils could offer community growing projects within Sheffield where people come to learn new skills and opportunities to link with local food growers. Sheffield City Council has access to plots of land that surround houses, schools and parks where potential growing projects could take place.

This could help support new and existing medium-sized community-led enterprises by providing new connections and opportunities to learn new skills for new entrants into farming. As stated in Sheffield's Food Strategy 2014 to 2017 they aimed to make community food growing an important part of Sheffield's communities and this is one way this could be achieved (Sheffield City Council, 2014). Many small enterprises and organisations within Sheffield set out to improve the food system, for example Regather, ShefFood and Food Works, who could point new entrants in the direction of projects they could get involved in. Offering an array of diverse projects can give new entrants skills in customer service, growing produce, or even helping set up and run vital projects at the heart of the Sheffield food system.

4.3.4 Apprenticeships

Apprenticeships are a good way to get into farming, which gives an industry-recognised qualification whilst learning the vital skills set needed for farming. This builds skills, knowledge and experience whilst getting paid to do so. Apprenticeships provide a ladder for progression from farmworker up to managerial roles. Currently, within the UK there are around 150,000 UK agriculture businesses employing over 500,000 people (Youth Employment, 2022). Showing there is scope for apprenticeships and if farmers have the funds to do so then they will take on an apprentice so students can grow their farming career learning from an experienced and qualified farmer. Students could also take part in an advanced apprenticeship, equivalent to two A levels, for example in engineering or maintenance, teaching the technical skills to be able to handle machinery and work within a farm environment.

To build the resilience of farms, Local Authorities need to cultivate apprenticeships, training and start-ups, to build upon local skills and employability in the good food sector (Sustain, 2021). Within Sheffield local farms could be taking on an apprentice or liaising with educational establishments to offer learning opportunities. The National Trust offers a range of apprenticeships and creates potential entry routes into farming by the adjacent roles of gardener or ranger. They offer training, support and resources allowing for personal development to blossom within roles (National Trust, 2022). With the Peak District being only a short distance away from Sheffield, many areas of land are under National Trust care.

4.3.5 Sixth Form and College

There are a variety of colleges and sixth forms which offer a range of courses including A levels and BTEC courses. If students are unsure about the career path they want to take then post 16 it is a good idea to follow on with education studying A levels or BTECs at a sixth form or college.

Sixth form allows for students to develop research, organisational, analytical, communication and collaboration skills, building upon academic achievements gained from secondary education.

Although not specific to farming, it would allow new entrants to further develop skills such as teamwork, working independently and using their initiative. Within sixth form, career advisors can provide help with the next steps after studying. Whether that is finding a volunteering role, a job in the farming industry or going on to university to study agriculture business management. If planning to study at a university, then gaining two or more relevant A-levels would be recommended. Most universities accept a minimum of two A-levels, however some universities will give offers based on UCAS points. It is important to check the precise requirements within chosen universities.

Colleges do provide a range of courses more suited to horticulture and agriculture. As many agricultural colleges across the UK offer courses like Land-based Activities, Agriculture, Agriculture & Land Management and Production. Colleges courses such as these offer a good framework, however improvements could be made in the provision of options that are more relevant to small horticultural enterprises and regenerative farming. Currently horticultural courses more often focus on gardening and maintenance rather than on food production. Nonetheless these amenity horticulture courses develop basic horticultural skills and give a good introduction to the industry, however they are not so well suited for getting into farming, as they do not teach essential farming skills. However, colleges can offer BTEC certificates and diplomas in agriculture and allow students to develop skills within a work-based setting.

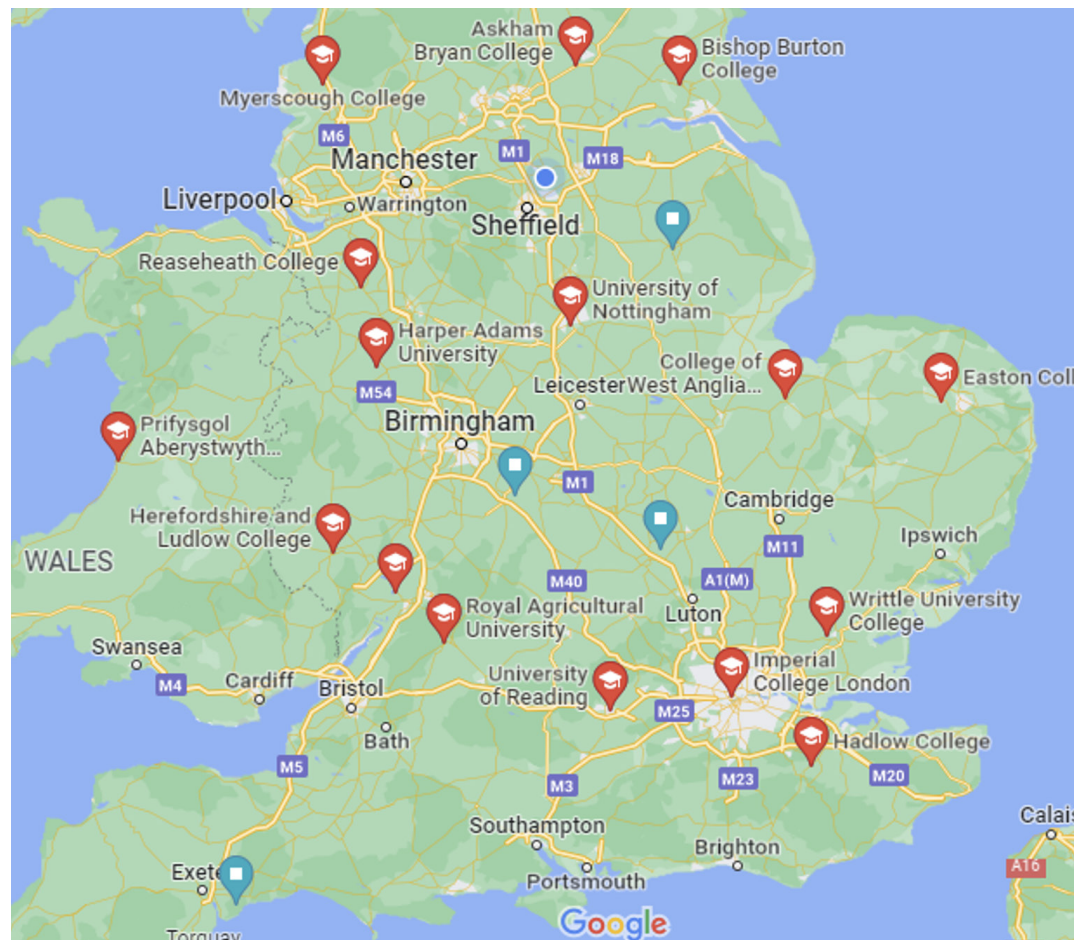
Sheffield College offers an Employer Skills Academy, where the College has partnered with local businesses to facilitate learning. This gives students hands-on experience within an industry they want to work within. An example of this would be that between 2019 and 2021 Sheffield college formed an Academy partnership with PJ Taste, a local catering company. Sustainability is core to PJ Taste's values, with 37 solar panels and 2 electric vans, sourcing local sustainable food and growing their own fruits and herbs (PJ Taste, 2022). This partnership offered students a place to cook and sell their produce. Multiple workshops and masterclasses provided students with a learning journey to develop their knowledge and skills (Sheffcol, 2022). This collaboration sets an example of how other businesses and stakeholders could partner with education facilities to develop further learning pathways within Sheffield to get more people into the farming industry. Giving new entrants hands-on experience of working within a farm setting.

4.3.6 University

Across the UK 74 universities offer 460 undergraduate degree courses in agriculture and horticulture. Also, aspiring students can take part in a foundation degree if they have not got the specific requirements to get onto their chosen degree.

Sheffield boasts two prestigious universities: Sheffield Hallam and The University of Sheffield. The University of Sheffield hosts the Institute of Sustainable Food, working closely with a range of stakeholders and offers a range of food-related courses. Specific agricultural universities may offer

the best hands-on experience in agriculture and horticulture, however these are often further away from urban centres. The closest specialist colleges and universities are the University of Nottingham and the University of Lincoln, as seen in figure 2. University of Nottingham Division of Agricultural & Environmental Sciences has research interests in the management of farm systems and the environmental interaction they have, alongside air and water pollution. The University of Lincoln Agri-food Technology Institute develops sustainability in food and farming through research, education and technology. Following these examples, there are ways for both Sheffield universities to improve their courses by providing land-based work within an urban context, working with stakeholders such as Regather to offer hands-on experience. Therefore, key levers for change would help provide partnerships within a local context, creating lifelong learning pathways to a good food economy within Sheffield. This would provide aspiring farmers with the skills and knowledge to start their own farm or move on to a FarmStart scheme as will be talked about below.



4.3.7 FarmStart

Farming needs to innovate, restructure, and create environmental and social resilience (The Landworkers Alliance, 2018). And this is exactly what FarmStart does. FarmStart guides people in establishing, sharing, supporting, and working together to increase opportunities within the farming industry. By allocating plots of land, training, mentoring, and sharing infrastructure (equipment, water supply). It allows people to start growing and testing their ideas within a protected environment by providing equipment, land, training and mentoring that builds upon their knowledge, skills, confidence, and experience (The Landworkers Alliance, 2018). This can be taken up by anyone and there is not a set age requirement, the only thing new entrants need is a desire to farm and an initial payment of fees. However, each FarmStart has different models, as will be explored below.

FarmStarts also fills the gap in opportunities for new entrants by using existing routes, producers, land availability and infrastructure allowing for farmers' networks to grow even further. Training and mentoring are hugely important to new entrants and this is a space where existing farmers share knowledge, practical skills, experiences and offer routes to market. New entrants also learn essential business and enterprise skills. FarmStart provides this vital entry point for farmers, allowing for further progression in the form of moving new entrants on to their own land as their fledgling business grows. This is hugely important for those who want to get into farming but are locked out due to the barriers which have been outlined above. This scheme is innovative in its response to the problem and many FarmStarts are already in existence within the UK.

Sheffield already has a well-regarded local food system with organisations like Heeley City Farm hosting community gardens comprising 10 acres of land, 100 raised beds, 20 polytunnels and greenhouses (Sheffield City Council, 2014). Sheffield City Council is responsible for approximately 3000 allotments - there is scope here for more partnerships to be formed. Therefore, FarmStarts could be a new opportunity for these stakeholders to go down to reverse the ageing population of the farming community. However, FarmStarts could take place in many different ways. The examples below suggest many different routes that could enable new entrants to flourish within the agricultural sector.

5.0 Case Studies

Tamar Grow Local

Tamar Grow Local, on the outskirts of Plymouth, was established in 2007 to provide local produce across the Tamar Valley and create opportunities for local people to grow their own food through allotments and community orchards. Whilst raising awareness of the benefits of local produce and shortening supply chains through the community. Tamar also offers many volunteer opportunities, growing the food and delivering veg bags as part of the Grow Share Cook project (Tamar Grow Local, 2022). In 2015 Tamar launched starter horticultural units, aimed at new entrants wanting to access parcels of land for a small fee (£500 per annum). Each new starter gets 1 acre of land, access to a polytunnel, water harvesting tank, equipment, training and business advice on how best to use the land available to them. New entrants are then able to sell their produce through markets and pop-up shops. In 2021 Tamar is home to seven small businesses including a vineyard, market gardens and a flax growing project. More information can be found at: <https://tamargrowlocal.org/>



OrganicLea

OrganicLea is a community food project based in Lea Valley in Northeast London, which produces and distributes food and plants locally, and inspires others to do the same. Funding from a wide variety of stakeholders allows people to come together and take action, creating a sustainable and just society. OrganicLea ensures that acres of land, seed sources and water are controlled by the people themselves rather than large corporations, guaranteeing the rights of producers and helping the local community to access a sustainable and healthy local food system. OrganicLea offers a wide range of activities to develop their skills through traineeship programmes. The traineeship programme is a 9-month structured volunteer training placement where the first 3 months are work-based training and mentoring, the next 3 months setting up a micro plot on an OrganicLea site and the final 3 months moving onto your own land. Other schemes are available in Horticulture Level 1 and 2, which charge £350 to £525. Mentoring is provided to those who want to make horticulture a career. Those who attend these courses can sell through OrganicLea's box schemes and other routes to market. More details about organic leas can be found at their website: <https://www.organiclea.org.uk/>



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Kindling Trust

Kindling Trust, based in Stockport near Manchester, has been working with the community, farmers, policymakers, and activists to challenge the industrial food system. They run a veg box scheme, wholesale veg operation, community food hub, volunteer programme and commercial grower's course. They offer training programmes and many volunteering opportunities to provide a route into farming and food production. A 4-day commercial organic growers course costs £180 and is taught by two market gardeners who cover the following:

- Running a food growing business (including finances, legal issues, record-keeping, Health & Safety, managing volunteers).
- Understanding and maintaining soil fertility.
- Small-scale market gardening - focusing on plant propagation and salad leaf production.
- Field-scale vegetable production, including pests and diseases and machinery maintenance.

The Kindling Trust's FarmStart programme costs £500 a year. With a mixture of classroom and practical training, new entrants gain knowledge on everything from soil to crop planning for a commercial operation. Produce is also sold through Manchester Veg People, Veg Box People and Unicorn Grocery. More information can be found at: <https://kindling.org.uk/>



Stream Farm

Stream Farm's vision is to provide as many families as possible the opportunity to earn a sustainable livelihood from small-scale regenerative farming in Somerset. Nine businesses currently run across the 250-acre plot of land, in which new entrants are trained up to handle day to day management of one of these plots. New entrants learn knowledge and skills to run a successful business, in which produce is sold directly under a single brand direct to customers, restaurants and occasional markets. Participants are paid a share of the profits - the aim being to achieve the Living Wage. Share Farmers often spend a couple of years at Stream Farm, before going on to pursue a variety of career routes in farming and related activities. Stream Farm website: <https://www.streamfarm.co.uk/>



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Stroud Community Agriculture

Stroud Community Agriculture-based in Gloucestershire is a community lead enterprise producing fresh organic produce for its members. New entrants are provided with a supported environment, mentorships, a guaranteed market for produce and access to land in which people leave with new skills, experience, and the confidence to start their own business. Stroud Farm is currently setting up adjacent new starter farms, supported by the main farm, where graduate apprentices learn by running their own plot. More updates and the work of Stroud Community Agriculture can be found on their website:

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



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6.0 Key Areas Discussion/Recommendations

Sheffield could follow in the footsteps of other FarmStart enterprises, building on learning pathways already in place, across colleges, universities and small/medium food enterprises. Partnerships need to be formed between the local council and food enterprises to identify good food businesses that could benefit from support and funding from Local Enterprise Partnership Growth Hubs. Targeted policy could facilitate apprenticeships and the creation of Employer Skills Academies, stimulating start-ups that develop skills and employability in the good food sector. Sheffield has local food hubs, of which Regather's veg box delivery service is an example. These are not only a route to market for the produce grown by new entrants but also a working template of how to manage and coordinate the growth of home delivery of local food in an urban context. Given the rich diversity of culture, events, market and key partnerships within the city, Sheffield has the means to create its own FarmStart, using:

- existing producers
- current routes to market
- current skills and training pathways
- relationships with potential partners

There are multiple Sheffield anchor institutions possessing levers for change, one of which would be to commit to buying more locally produced food, providing a market for new entrants to the sector. However, with land suitable for food growing not readily available, there is a role for the City Council to provide uncultivated allotments or underused parkland for the creation of a FarmStart. If a FarmStart was to be created, then Sheffield would be able to provide a missing element within the lifelong learning pathway into food production.

7.0 Key Organisations

Organisation Name	Contact
The University of Sheffield	<p>https://www.sheffield.ac.uk/sustainable-food</p>  <p>DR MEGAN LEWIS Associate Director, Institute For Sustainable Food Faculty of Science Email: megan.lewis@sheffield.ac.uk Phone: +44 114 2229775</p>
Regather	<p>https://regather.net/</p> <p>57-59 Club Garden Road, Sheffield, S11 8BU</p>
ShefFood	<p>https://sheffield.org.uk/</p> <p>57-59 Club Garden Road, Sheffield, S11 8BU</p>
National Farming Union	<p>https://www.nfuonline.com/</p> <p>Agriculture House Stoneleigh House Stoneleigh Park Stoneleigh Warwickshire CV8 2TZ</p> <p>Tel: 024 7685 8500 Twitter: @NFUtweets Facebook: NFUonline LinkedIn: LinkedIn/nfu</p>
DECSY	<p>https://www.decsy.org.uk/</p> <p>Email: info@decsy.org.uk Tel: 0114 241 2750</p>

Organisation Name	Contact
The Linking Network	<p>https://thelinkingnetwork.org.uk/</p> <p>Floor 7 Margaret McMillan Tower Princes Way Bradford, BD1 1NN</p> <p>Tel: 01274 439248 Email: info@thelinkingnetwork.org.uk</p>
Wwoof	<p>https://wwoof.net/</p>
Tamar Grow Local	<p>https://tamargrowlocal.org/</p> <p>5B Florence Road Industrial Estate, Kelly Bray Callington, Cornwall, PL17 8EX</p> <p>Tel: 01579 208412 Email: info@tamargrowlocal.org</p>
OrganicLea	<p>https://www.organiclea.org.uk/</p> <p>Tel: 020 8524 4994 Email: info@organiclea.org.uk</p>
The Kindling Trust	<p>https://kindling.org.uk/</p> <p>Kindling Trust, Bridge 5 Mill, Ancoats, Manchester, M4 7HR</p> <p>Tel: 0161 818 8384 Email: mail@kindling.org.uk Skype: kindling-trust</p>

Organisation Name	Contact
Stream Farm	<p>https://www.streamfarm.co.uk/</p> <p>Stream Farm Broomfield Bridgwater Somerset TA5 2EN</p> <p>Tel: 01823 451191 Email: info@streamfarm.co.uk</p>
Stroud Community Agriculture	<p>https://www.stroudcommunityagriculture.org/</p> <p>Tel: 0845 4580814 Email: info@StroudCommunityAgriculture.org</p>
Sheffield City College	<p>https://www.sheffcol.ac.uk/</p>
Sheffield City Council	<p>https://www.sheffield.gov.uk/home</p> <p>Sheffield City Council Town Hall Pinstone Street Sheffield S1 2HH</p> <p>Tel: 0114 273 4567 Call with textrelay (Type Talk) - provided by the RNID</p>
Sustain	<p>https://www.sustainweb.org/</p> <p>The Green House, 244-254 Cambridge Heath Road London, E2 9DA</p> <p>Tel: 020 3559 6777 Email: sustain@sustainweb.org</p>

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