## A Bright Future for Horticulture



LWA Submission for the House of Lords Horticulture Sector Committee Call for Evidence

April 2023



## **Executive Summary**

The Landworkers' Alliance (LWA) is a grassroots union of farmers, growers and landbased workers with a mission to build a food system where everyone has access to healthy and affordable food which has been produced through ecologically sound and sustainable methods.

37% of our 2,348 members are actively involved in agroecological horticulture, and over half of our members are under 40 years old. We have a vision for a food system in which every city in the UK is supplied by a dense and thriving network of local and regional growers. To achieve this, we are advocating for a "Horticulture Renewal Programme", integrating recruitment, training, new entrant support, capital grants and the development of resilient local food systems. We work on a national level coordinating one of the horticulture E.L.M.S. Test and Trials, "Growing the Goods", and advocate for change on a policy level as part of the the Fruit and Vegetable Alliance (FVA) and Edible Horticulture Roundtable<sup>1</sup>. We also lead a migrant workers' solidarity project which works to uncover and to improve the working conditions for migrant horticultural seasonal workers in the UK. While our members' agroecological growing methods are highly productive, the sector requires a dramatic scaling up to provide the volume of produce required to meet public health recommendations. To this end, we also work with conventional growers to help the horticulture sector transition towards a more sustainable future, primarily through our E.L.M.S trial and involvement in the FVA.

In this submission, we provide evidence that an agroecological, "land-sharing" approach can deliver carbon negative horticulture, while also reducing greenhouse gas emissions beyond the farm gate through local and regional supply chains. We also show how our members' agroecological farming methods promote agrobiodiversity (e.g. growing diverse crops and saving seed to build resilience in the face of climate change) build soil health, improve natural pest control, boost pollination and promote water conservation and efficiency (e.g. through increased soil moisture holding capacity and rainwater storage). This submission also provides evidence of the multiple benefits to physical and mental health that public engagement in agroecological horticulture can bring to individuals and communities.

In contrast to the perception that UK workers aren't interested in horticultural work, we provide evidence in this submission that many young people and career changers are eager to embark on horticultural training and pursue growing careers. Current demand for the limited number of training courses and traineeships is high, and there are a growing number of job opportunities that exist for skilled agroecological growers. However, those wishing to start their own businesses face significant barriers, including access to affordable land, lack of start-up capital and planning policies which don't recognise the value of small-scale horticultural businesses. At present, growers operating on five hectares or less are also excluded from agricultural payment schemes, including E.L.M.S., despite the multiple public goods they deliver.

1. The Fruit and Vegetable Alliance is a coalition of 14 organisations representing the UK horticulture sector established in 2018 to feed into a thrice yearly "Edible Horticulture Roundtable" with the Defra horticulture team and Agriculture Minister. Its founding aim was to increase supply of fruit and vegetables as part of the Food Foundation's "Peas Please" campaign, to encourage the consumption of vegetables to improve public health.

We welcome the Government's commitment to invest in horticulture, but we are concerned that the emphasis on hi-tech solutions, such as vertical farming and automation, risks further concentrating production into the hands of the few businesses who can afford the high capital start-up costs. Instead, we advocate a farmer-focussed approach to research and development, that encourages the transfer of knowledge between different types of growers, and enables farmers to work with academics and researchers to address the problems they face.

On a broader scale, we believe that a lack of supportive government policy has placed the UK in a precarious position. Horticultural production is beginning to decline as a result of growers reducing the acreages used for fruit and vegetable production, or pulling out of the sector altogether, due to their returns being too small. Our reliance on fruit and veg imports from overseas is not only undercutting UK producers, but also becoming increasingly risky at a time when climate change is causing more extreme weather events and poor harvests in exporting countries. We therefore urge the Government to take an ambitious and cross-departmental approach to horticultural strategy, that prioritises boosting sustainable domestic production and training a new generation of UK workers.



Photo credit: Adrian Arbib

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## **1. Horticulture in the Landworkers' Alliance**

**1.1** The Landworkers' Alliance is a union of agroecological farmers, growers and foresters who are working together to build a food system based on the principles of Food Sovereignty.<sup>2</sup>Our 2348 full members are all actively engaged in some form of land work, and we have an additional 494 supporter members who are not active farmers. 16% of our members are under the age of 30, and 35% are 30-40 years old, with only 12% being over the age of 60. This is a significantly younger age demographic than the national average for agriculture, where only 12% are under the age of 35 and 36% are 65 or older.<sup>3</sup> Many of our members operate on small areas of land and 869 (37%) are either fully or partially involved in horticulture. This dominance of horticulture in our membership reflects that the barriers to entry for horticulture are lower than for other farming sectors. For example, viable enterprises can be started on smaller land areas, while the capital investment required, although significant, is more accessible than for sectors such as modern arable or dairy farms.

**1.2** Agroecology is the application of ecological concepts and principals in farming, whilst empowering local people and valuing the health of the humans, plants and animals that make up the ecosystem.<sup>4</sup> A detail that distinguishes agroecology from organic farming, is that agroecological principles extend beyond the farm gate and into the supply chain. Important human principles include, that growers are paid a fair price for their produce, that efforts are being made to engage with customers, that produce is accessible to as many people as possible and that workers are paid at or over the minimum wage or through training or pre-agreed in-kind exchange. While many of our members are certified organic growers, some are not certified, but grow to organic principles and, through selling direct sales (such as box schemes, CSA,<sup>5</sup> farmers markets or box schemes) have a close and fully transparent relationship with their customers. Within this aim of balancing the price received by the farmer with the affordability of produce and paying workers a fair wage lies a tension, and it is not always possible to achieve all three. However, the aspiration to achieve food justice and sustainability means that a negotiation between buyers and sellers, workers/volunteers and employers is at play.

1.3 The Landworkers' Alliance's work on horticulture falls into several streams:

 Fruit and Vegetable Alliance (FVA) - At a sector level, we are advocating on behalf of agroecological growers through the Fruit and Vegetable Alliance (FVA), a consortium of organisations representing the UK horticulture sector, which meets with the Defra Horticulture Team and Minister of Agriculture three times per year at the Edible Horticulture Round Table (EHRG).

Food Sovereignty is "people's right to healthy and culturally appropriate food, produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems" (Via Campesina 1996). It advocates agroecological production and aims to maintain native seeds, diversify crops, conserve natural resources and strengthen local food systems.
 Defra (2021) Agriculture in the United Kingdom, p27

<sup>4.</sup> Smaje, C. and Rowlatt, C. (2011). Key policies for agroecology in the UK for All Party Parliamentary Group on Agroecology.5. CSA stands for Community Supported Agriculture, a form of farming in which customers share the risks of production with the farmer. Many forms of CSA exist, but the most common model is that customers become members of a CSA scheme by committing to buy seasonal vegetables and/or fruit throughout the season and accepting that their "share" of the harvest might vary in quantity and quality depending on the weather, pest attack or other circumstances beyond the growers' control.. Some weeks they might receive a bountiful "share", while in other weeks the share might be more meagre. CSA usually involves a high level of member engagement, including newsletters, social events and sometimes the members being asked to contribute 2-3 sessions of labour to contribute to farm tasks.

- 'Growing the Goods' E.L.M.S. Trial Since 2020, we have also been running an Environmental Land Management Scheme (E.L.M.S.) Test and Trial focussing on horticulture, called "Growing the Goods". We are now in Phase 2 of this trial and so far have worked with over 90 growers of all scales and management systems (vegetables, fruit, glasshouse, ornamental, organic and conventional). Together we have co-designed and tested horticultural SFI Standards, a system for creating and mapping Land Management Plans, allocating fair payments and have gathered feedback on blended finance options.
- Horticulture Campaign Since 2018, Landworkers' Alliance has been running a horticulture campaign which has the following aims: Tasty, fresh and affordable fruit and vegetables for all; Local produce boosting local economies; A decentralised food supply; Viable livelihoods and attractive employment; and Food connection and education. We have a vision of every city in the UK having a local and regional supply system, based on the Food Zones<sup>6</sup>model combined with a dense and thriving network of growers selling directly or via independent retailers and caterers throughout rural areas. We intend to work with local food partnerships formed by the Sustainable Food Places<sup>7</sup> initiative to explore how our members can contribute to their objectives improving access to healthy and sustainable fresh produce. Local Food Partnerships were singled out in the Government Food Strategy (June 2022) as "an effective way to address diet-related ill-health and inequality" (2.2.3, p24).
- Migrant Workers Project Since 2022, the LWA has been leading the Migrant Workers Solidarity Campaign. This campaign is focused on the working conditions of farm workers participating in the Seasonal Worker Visa scheme, and has focused especially on workers placed on large, intensive soft fruit farms supplying UK supermarkets. It seeks to understand the structural drivers of bad working conditions in the migration system and in supermarket dominance of the supply chain. This work also seeks to amplify the voices of migrant workers themselves, and seeks to develop methods for building their capacity to . Our campaign also works closely with agricultural workers unions that are part of the UK's international supply chain, particularly those based in Morocco and Southern Spain. This campaign will be publishing a report of the conditions of migrant workers in the UK in mid May.

**1.4** At present, the volume of produce grown by the agroecological horticulture sector is a small fraction of 3.1 million tonnes grown in the UK. A significant expansion of agroecological horticulture, in combination with routes to market that provide the grower with a better price would strengthen the resilience of UK fresh produce supply. We are confident that with targeted support, including appropriate training opportunities, a flexible capital grants scheme and better functioning markets, agroecological growers could make a much bigger contribution to the UK domestic market. We propose a "Horticulture Renewal Program"<sup>8</sup> which combines such support into an integrated programme. Furthermore, through active public engagement, agroecological growers are uniquely placed to encourage increased consumption of fruit and vegetables, changed eating habits and better health outcomes. We hope that the evidence provided below will persuade the House of Lords Horticulture Select Committee that policy and financial support for an expansion of the agroecological horticulture sector could contribute to horticulture becoming carbon negative, whilst addressing other environmental and health challenges, and in doing so reduce the future cost burden to the NHS of diet related ill health.

6. Food Zones is a term coined by Growing Communities, referring to a set of concentric rings around a city representing the supply of fresh produce and other food directly from urban, peri-urban and rural areas, and via wholesalers from the UK, Europe and further afield. It is a vision for "how can we reduce the amount of energy, fossil fuels and resources it takes to feed us, while also creating jobs and community in both urban and rural areas and producing delicious food that is good for us and the planet."

<sup>7.</sup> Sustainable Food Places is an initiative run by Sustain, the Soil Association and Food Matters which helps partnerships form in cities, counties and towns, with the intention of making healthy, sustainably produced food a defining characteristic of where people live. 8. A New Deal for Horticulture: Ideas for a horticultural renewal programme and illustrative case studies. Landworkers' Alliance

# 2. Issues not addressed in the Call for Evidence

**2.1** Two issues not addressed in the Committee's Call for Evidence are **biodiversity** and **supply chain fairness**. Each, if not addressed as a matter of urgency, poses a significant risk to the future success of the UK horticulture sector. Before responding to the other questions posed by the Committee, we provide evidence of why these issues require attention and suggest agroecological solutions.

### **Biodiversity**

**2.2** The horticulture sector relies on ecosystem services delivered by healthy biodiversity, soil biology and the hydrological cycle, as well as a stable climate. While matters relating to climate and water are addressed in section 3 below, we highlight the risk to horticulture from soil degradation, the loss of pollinators and natural pest control due to healthy ecosystems.

**2.3** The last two decades have seen a paradigm shift in the understanding of soil science, with the focus moving from soil chemistry to biology.<sup>9</sup> A healthy soil is now seen as an living soil ecosystem, based on organic matter and mineral substrate and home to millions of fungi, bacteria and microfauna, each with a role in delivering fertility. Furthermore, the role of soil, especially peat rich soils, is increasingly understood for its role as a carbon sink, an understanding that is vital in combating climate change. However, a combination of soil erosion, compaction and low organic matter content are compromising the soil health, while dryland cultivation of peat is resulting in significant greenhouse gas emissions.

**2.4** The UK's flying insect population has declined by as much as 60% since 2004, due to a combination of loss and damage to habitats, climate change, pollution of rivers and streams, use of pesticides, and development of wild spaces<sup>10</sup> While all insects are inherently valuable, in horticulture a healthy insect population performs two vital roles - pollination and pest control. By improving the yield, quality and resilience of crops, insect pollination has been valued at £400 million per year to the UK economy,<sup>11</sup> while natural predation has the potential to reduce or eliminate the need for plant protection products. Not only are insects important, but the ecosystems of wild plants and habitats on which they rely and the birds and animals that predate them are essential to ecosystem health. These "ecosystem services" need to be integrated with horticulture, not isolated in nature reserves.

**2.5** An active debate within agriculture at present is the land sparing versus land sharing debate. Much conventional horticultural production tends towards the land sparing end of the spectrum, focussing productivity on the highest grade agricultural land in areas such as the Fens, the Sussex Coastal plain and Cornwall for vegetables, while fruit growing is concentrated in Kent, Hereford and Worcester and the Scottish berry belt. At present less than 1% of utilisable agricultural land in the UK is used for horticulture, producing £2.6 billion worth fruit and vegetables<sup>12</sup>. However, the intensive monocultures grown in these areas, lack of habitat and reliance on chemical fertilisers and plant protection products are undermining the ecosystem services on which such productivity relies. Furthermore, evidence is emerging of the significance of greenhouse gas emissions from dryland peat to climate change.

<sup>9.</sup> See Dr. Elaine Ingham's "Soil Food Web School"

<sup>10.</sup> Lawrence Ball, Robbie Still, Alison Riggs, Alana Skilbeck, Matt Shardlow, Andrew Whitehous, & Paul Tinsley Marshall (2021) The Bugs Matter Citizen Science Survey. Buglife and Kent Wildlife Trust

<sup>11.</sup> Mancini, F. (2022) Biodiversity and Ecosystem Services – 10. status of pollinating insects – technical background document. UK Government 12. Defra (2022) Agriculture in the United Kingdom.

**2.6** Agroecological horticulture takes a land sharing approach to nature, integrating biodiversity with production and relying on healthy ecosystems to provide soil fertility, pest control, pollination and other services. LWA advocates fruit and vegetable production being distributed around the UK, with more being produced locally to where it will be eaten. This would remove some of the environmental pressure from areas of intensive horticulture, such as the Fens, allowing more space for nature and carbon, while allowing overall UK production to increase. Many of our members grow vegetables and fruit on Grade 3 or even Grade 4 agricultural land, due to this being the only land available to them, proving that good yields are possible even on lower grade land.<sup>13</sup>

**2.7.** We encourage the Horticulture Sector Committee to consider horticulture's role in contributing to and ameliorating the biodiversity crisis. It is essential that sufficient payments are offered through E.L.M.S. to support monocultural, chemical reliant growers to transition to systems that work more closely with nature. At present, payment levels proposed will be insufficient to attract growers to these schemes. Furthermore, the minimum threshold of 5ha for agricultural payments should be removed, to enable small-scale agroecological and organic growers who currently deliver multiple public goods at their own expense, to benefit from E.L.M.S.

### Supply chain fairness

**2.8** Retailers can either enable or undermine the financial viability of growers, depending on whether they pay a price that covers the cost of production and leaves sufficient margin for reinvestment. A recent report by Sustain found that for 1kg of apples purchased in a supermarket (about 6 apples), the apple grower has costs of 76p, yet receives in profit just 1% (3 pence) of a selling price of £2.20. For 1kg of carrots purchased in a supermarket, the carrot grower has costs of 14p, yet receives negligible profit on a selling price.<sup>14</sup>

**2.9** The LWA promotes more resilient food system models, based on local and regional distribution, to ensure that the farmer and all those in the supply chain get a fair proportion of the price paid for the food. This can be achieved either through direct marketing or through "farmer focussed routes to market", an approach being promoted by the organisation Better Food Traders<sup>15</sup> A cost-benefit analysis demonstrated how every pound of costs spent by Growing Communities, a fruit and vegetable scheme in Hackney, delivers £3.73 worth of value of social and environmental benefits, due to farmers receiving a better price for their produce, better pay and working conditions for employees and organic production practices.<sup>16</sup>

**2.10** Many large scale growers are thinking hard about whether to continue in vegetable or fruit production due to the slender margins they currently receive. Diminishing margins have already lead to a decline in production by as much as 20-30% in some sectors.<sup>17</sup>We urge the committee to look beyond the dominant industrial supply model. Potential exists to explore how regionalised, farmer focussed alternative models could be adapted to accommodate higher volumes, so that growers could sell at least some of their produce to local customers and gain a price that enables them to thrive and reinvest in more sustainable production practices.

<sup>13.</sup> Laughton, R. (2017) A Matter of Scale: A study of the productivity, financial viability and multifunctional benefits of small farms (20ha and less). Landworkers Alliance and Centre for Agroecology, Water and Resilience, Coventry University.

<sup>14.</sup> Jack, L., Hammans H., Hird, V. and Woodward, J. (2022) Unpicking Food Prices: Where does your food pound go and why do farmers get so little? Sustain

<sup>15.</sup> Better Food Traders is a UK-wide network that supports and promotes ethical food retailers who sell locally grown, planet friendly food and ensures that all along the supply chain are paid a fair price/wage for their produce.

<sup>16.</sup> Jacarini, C., Lupton-Paez, M. and Phagoora, J. (2020). Farmer-Focused Routes to Market: An evaluation of the social, environmental, and economic contributions of Growing Communities. New Economics Foundation.

<sup>17.</sup> Fruit and Vegetable Alliance (2023) Cultivating Success: Priorities for increasing sustainable production to meet growing demand. Evidence submitted to HoL by Fruit and Vegetable Alliance.

# 3. The impact of climate change on the sector and how it can be mitigated

**3.1** Climate change impacts are already being experienced by growers. These include the extreme heat and drought in the summer of 2022, heavy rainfalls causing waterlogging and soil erosion; strong winds that damage crops, polytunnels and glasshouses and the arrival of exotic pests and diseases. Agroecological practices are beneficial both in mitigating climate change, and in helping growers to adapt to the challenges caused by extreme weather.

**3.2** Agroecological growers use the organic principles of building soil organic matter to create a living, carbon rich, soil; manage pests and diseases without heavy reliance chemical pesticides, avoid artificial fertilisers, rotating crops and promote biodiversity. In addition, through their short supply chains, often involving harvest and delivery on the same day, they are able to reduce energy demands from refrigeration, packaging and transport.

**3.3** Practices such as the growing of green manures and cover crops or adding composed plant waste or farmyard manure, to build fertility and soil structure, sequester carbon in the soil. In addition, the integration of woody features, such as hedgerows and coppiced woodland further contributes to the carbon sequestration potential of organic market gardens. Innovative practices, such as agroforestry, mulching with ramial wood chip<sup>18</sup> and the addition of biochar, further increase the carbon sequestration potential of agroecology. Organic market gardens using these practices have found themselves to be carbon negative. For example, Scilly Organics sequesters a net of 19.24 tonnes per year (the difference between the 5.17 tonnes emitted from inventory (polytunnels and machinery), land use and fuel, and the 24.41 tonnes sequestered by perennial crops, woodland and soil organic matter)<sup>19</sup>. Another example of a carbon negative market garden is Tolhurst Organics, which is 4 tonnes carbon negative (the difference between 16.6 tonnes CO2 equivalent of emissions mainly from vegetable deliveries, tractor and water pumping diesel and electricity, and 21 tonnes CO2 equivalent sequestered through use of green manures, shallow and timely cultivation, hedgerows and coppice woodland used for ramial wood chip and grass margins).

**3.4** The focus on soil health and organic matter improves the water holding capacity of agroecological soils and reduces run-off and soil erosion. In combination with practices such as mulching and the use of no-dig fixed beds, the need for irrigation can be significantly reduced. In addition, rainwater is often harvested off roofs and stored in tanks or reservoirs. It is rare to find agroecological growers extracting water from rivers. As hot, dry summers become more prevalent, agroecological growers are well placed to continue producing high quality fresh produce.

19. See "Carbon negative fruit and veg" Blog (2020), www.scillyorganics.com

**3.5** A distinguishing feature of agroecology is the agrobiodiversity of growers' systems. Most produce at least 20 different lines of vegetables or fruit (usually far more) and many grow multiple varieties of vegetable type and routinely save seed. The practice of seed saving involves selecting seed from plants that have done well in a particular soil or climate, over time creating local "land races" and building genetic resilience through diversifying plant characteristics rather than aiming for uniformity. Care is also taken to choose disease resistant varieties, particularly when perennial crops such as fruit trees are being selected.

**3.6** Agrobiodiversity is also beneficial for plant health, as spreading risk between multiple types and varieties of vegetables reduces the speed of transmission of plant pests and diseases, compared to monocultures. This strategy is used by organic growers, in combination with encouraging natural pest control by wildlife conservation, to grow crops without the use of pesticides and artificial fertilisers. Nitrate fertilisers are a significant source of both carbon dioxide (emitted in their manufacture) and nitrous oxide (a potent and long lasting greenhouse gas which is released during the use and breakdown of reactive nitrogen)<sup>20</sup>, so by avoiding these, agroecological growers are further reducing their greenhouse gas emissions.

**3.7** Climate Change affects horticulture across the world and it is in the national interest to have a diverse and resilient horticultural sector in the UK to help buffer shocks elsewhere. A national target for home-grown horticultural produce distributed through short and farmer-focused supply chains would be helpful.



Photo credit: Chloe Eversfield

20. Soil Association (2020) Fixing Nitrogen: The challenge for climate, nature and health.

## 4. Skills and recruitment challenges

**4.1** Horticulture suffers from an image problem, and is perceived by many as "low skilled and unappealing", dirty physical labour, with long hours and low pay.<sup>21</sup> In recent years, conventional growers have relied heavily on overseas labour both to get the number of workers necessary and obtain the necessary skills, which are lacking in UK workers. This has created a perception that UK workers are not interested in horticulture. LWA is working on three fronts in relation to skills and recruitment, namely with UK new entrants wanting to begin horticultural careers (either young people or career changers), with non-agroecological farmers wanting to transition to agroecology and with overseas migrant workers.

### **Recruiting and Training New Entrants**

**4.2** Our experience at Landworkers' Alliance is that there are many people wanting to work in organic and agroecological horticulture, and there is a real hunger for training and opportunities. Workers are attracted by wanting to do meaningful and diverse work, that benefits the environment and society,<sup>22</sup> and many are drawn to the autonomy of running their own small businesses.<sup>33</sup>The "Digging into Horticulture" project worked with a focus group of 15 Millennials, to explore why they were attracted to small rather than large-scale horticulture and found that they were attracted to "autonomy, progression, rural living and community". This quote from one of the participants sums up the attitude of many LWA horticulture members, "I want my job to make me feel fulfilled, and have a meaningful job that is in line with my principles. I want to make a difference to other people, and feel that I am working towards change". Our report, "The Attraction of Agroecology"<sup>24</sup> contains 10 case studies of new entrants (including seven growers or aspiring growers), based on interviews about what motivated both young people and career changers to choose agroecological work. Motivations include, "growing food in an environmentally friendly way could have a significant positive impact on the health of wildlife and people"; and wanting "be part of the movement to repopulate the countryside and get people back onto the land".

**4.3** There is an urgent need and a demand for appropriate, funded horticultural training. The new level 2, 3 and 4 courses in Regenerative Agriculture and Horticulture at The Apricot Centre in Devon were heavily oversubscribed, with 496 expressions of interest and 283 applications for 23 places on one level 3 course. At Organiclea, a market garden in the Lea Valley in North London, NVQ courses organic horticulture have been well subscribed for many years, while the Kindling Trust in Manchester runs a popular Farm Start training scheme for graduates of its "So you want to be a market gardener" course. While these courses provide valued training opportunities, provision is patchy and insufficient to meet the demand. Whilst some local councils have chosen to fund provision of horticultural education (eg at Apricot Centre in Devon), there is no regular state funding for such training. This means participants must fund their own course fees and living expenses, making the costs of horticultural training prohibitively high for many would-be participants.

21. Eldridge, H.M. (2018) Digging into Horticulture: Encouraging the next generation of producers. Soil Association.

22. Laughton, R (2017): A Matter of Scale: A study of the productivity, financial viability and multifunctional benefits of small farms (20ha and less). Centre for Agroecology, Water and Resilience and Landworkers' Alliance.

23. Eldridge, H.M. (2018) Digging into Horticulture: Encouraging the next generation of producers. Soil Association.

24. Styles, G., Talks, I and Tomlinson, H. (2022) The Attraction of Agroecology and the barriers faced by new entrants pursuing agroecological farming and land work. Landworkers' Alliance Publication.

**4.3** Many growers would like to take on a paid trainee, but margins are often too tight to justify the risk of paying an inexperienced worker, who may not contribute sufficiently to the business. In 2020 Landworkers' Alliance became a gateway organisation for the Government's KickStart scheme, which was introduced to help 16-24year olds into employment. With the Government paying for 25hours per week for six months per placement, we were able to facilitate 61 work placements at the farms of 34 of our members, many of whom are horticulturalists. Most of these placements were oversubscribed, and 55% of Kickstart employees who completed a 6 month placement went on to further training or employment within agroecology. Despite some bureaucratic issues with the Department of Work and Pensions, who administered the scheme, most host farms were positive about the experience and would welcome its reintroduction.

**4.4** For those who graduate from horticultural training, increasing job opportunities are becoming available. However, many new entrants are keen to start their own business. Start-up capital required for establishing a market garden is minimal, ranging from £12,0001 to £27,5202 compared to £50,000 - £250,000 for larger agroecological businesses, before land and housing is taken into account.<sup>25</sup> Nevertheless, many new entrants face significant challenges. These include finding land either to buy or on a secure enough tenancy to give them the confidence to invest, having sufficient start-up capital to invest in good quality infrastructure and equipment, and getting planning permission for necessary infrastructure (such as polytunnels and packing sheds). Farms under five hectares lack permitted development rights, and a perception that such farms cannot be genuine commercial propositions often leads to lengthy, expensive and stressful planning struggles during early years of establishment.

**4.5** To conclude on new entrants and skills, there is an appetite to work in agroecological horticulture among both young people and career changers, but the challenges faced by those seeking training and wanting to set up businesses are significant. If these challenges were addressed with a well designed "Horticulture Renewal Scheme",<sup>26</sup> which provides a clear pathway from recruitment, through training, support during establishment and access to markets that provide a reasonable return, many more people could be attracted to horticultural careers.



Photo credit: Clem Sandison

Photo credit: Joya Berrow

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25. Styles, G. (2021) New entrants to agroecological farming: Example business start up costs and the case for public support.
Landworkers' Alliance
26. Landworkers Alliance (2018) A New Deal for Horticulture: Ideas for a horticultural renewal programme and illustrative case studies.

### Training conventional growers in agroecological methods

**4.7** During 2021/22 LWA delivered a Future Farm Resilience Fund contract for Defra, involving training webinars and farm visits show casing agroecological farming methods. The aim of this project was to help existing farmers and growers adapt their systems in preparation for the introduction of E.L.M.S. We are keen to undertake more such work.

### **Migrant Worker Rights**

**4.8** We recognise that at present most UK vegetables and fruit are produced, harvested and sold through industrialised supply chains. The low profit margins that many conventional growers have to operate with, along with dependence on a small number of powerful customers, creates a situation where intensification of work is necessary for the growers' business survival.<sup>27</sup> In the immediate term it is essential that conditions are improved for overseas migrant workers, to ensure that their dignity and rights are respected. For the past year, LWA has been running a migrant worker solidarity campaign, providing the insights outlined in the following paragraphs.

**4.9** In their study of the Seasonal Workers Pilot scheme in 2020-21, Focus on Labour Exploitation (FLEX) found that there is "a serious risk that forced labour could take place on the SWP if action is not taken"<sup>28</sup> as the scheme "places significant restrictions on workers' access to and mobility within the labour market".<sup>29</sup>

**4.10** In particular, the high cost of visas, travel, and other expenses mean that workers are arriving in the UK with up to  $\leq$ 1,000 of debt, often incurred from informal sources<sup>30</sup> FLEX found that this debt places a high mental strain on individuals, due to the lack of certainty that they would be able to pay back the costs.

**4.11** Risks of debt bondage have been intensified by the reliance in recent years of UK recruiters on unfamiliar countries. Insufficient time has been given to recruiters to learn local labour laws, and they have had to rely on outsourcing work to local firms who have overcharged workers to participate in the scheme. The result has been a series of scandals involving Nepalese and <sup>31</sup> Indonesian wo<sup>32</sup>kers being charged up to £5,000 to participate in the scheme.

**4.12** Additionally, there are risks within the scheme of workers being tied to exploitative employers. According to guidance for scheme operators, transfers to different farms should be granted unless there are significant reasons not to permit the request, such as the worker's visa expiring imminently. However, ICIBI found that some workers were not informed of this right, were forced to pay to transfer, and requests to transfer were incorrectly denied.<sup>33</sup> Similarly, FLEX's research found the majority of workers interviewed reported unsuccessful attempts at transferring, and many stated that their requests were denied because their employer refused to let them leave.<sup>34</sup> Without access to alternative employment options, workers facing high debt may have no choice but to continue to work in exploitative conditions.

34. FLEX, Assessment of the Risk of Human Trafficking for Forced Labour pg. 14

<sup>27.</sup> Rogaly, Ben. "Intensification of workplace regimes in British horticulture: the role of migrant workers." Population, space and place 14.6 (2008) pg. 500.

<sup>28.</sup> FLEX, & Fife Migrants Forum,. Assessment of the Risk of Human Trafficking for Forced Labour on the UK Seasonal Worker Pilot (2021) pg.9

<sup>29.</sup> Ibid pg. 21

<sup>30.</sup> Ibid pg. 11

<sup>31.</sup> Emiliano Mellino, Rudra Pangeni, Pete Pattison, 'Migrant fruit pickers charged thousands in illegal fees to work on UK farms' Bureau of Investigative Journalism May 27th 2022 https://www.thebureauinvestigates.com/stories/2022-05-27/migrant-fruit-pickers-charged-thousands-in-illegal-fees-to-work-on-uk-farms [accessed 4/4/23]

<sup>32.</sup> Emily Dugan, 'Revealed: Indonesian workers on UK farm 'at risk of debt bondage" The Guardian 14th August 2022 https://www.theguardian.com/uk-news/2022/aug/14/uk-farm-workers-kent-debt-indonesian-brokers [accessed 4/4/23]
33. ICIBI, An inspection of the immigration system as it relates to the agricultural sector: May—August 2022. Independent Chief Inspector of Borders and Immigration (2022) pg 30

**4.13** At the same time, Home Office monitoring of worker welfare under the scheme lacked proper enforcement mechanisms. Of 25 farm visits undertaken by the Home Office between February 2021 and February 2022, 8 indicated serious welfare issues such as denial of healthcare, non-payment of wages, unsanitary accommodation, and discrimination on grounds of nationality. No allegations were investigated by the Home Office, by scheme operators, or by other government organisations, and no attempt was made by the Home Office to corroborate allegations made.<sup>35</sup> When asked about their workload, compliance officers described being "swamped", stating that current resourcing is around 50% capacity of what it should be.<sup>36</sup>

**4.14** To resolve these difficulties, the LWA recommends:

- Removing the risk of debt bondage by abolishing visa fees and travel costs for participants in the SWV. These costs should be borne either by the Home Office, scheme operators, or supermarkets.
- A worker-led social responsibility approach similar to that developed by the Coalition of Immokalee Workers in Florida.<sup>37</sup> Involving farmworkers in monitoring will provide the Home Office with real time information for enforcement.
- To aid this, all workers should receive a brochure detailing their rights and responsibilities under the SWV, translated into their native language.Workers should participate in a mandatory information session on rights and redress, provided by former farmworkers. The Home Office should also provide a hotline for workers to report misconduct as part of this brochure.
- To ameliorate the role of supermarket dominance in the supply chain, the UK government should encourage supermarkets to pay an extra penny per pound of produce to fund wage increases and worker bonuses.<sup>38</sup>
- The UK government should help facilitate this support by following the lead of the Scottish government in financing bodies such as the Worker Support Centre based in Edinburgh. The Centre is staffed by former farmworkers, and undertakes case work on behalf of current workers in Scotland.

36. Ibid pg. 46

<sup>35.</sup> ICIBI,. An inspection of the immigration system as it relates to the agricultural sector pp. 44-45

<sup>37.</sup> For more information please consult Coalition of Immokalee Workers, 'Worker-driven Social Responsibility (WSR): A new idea for a new century' https://ciw-online.org/blog/2014/06/wsr/ 16.6.2014 [accessed 5.4.23]

<sup>38.</sup> This is undertaken by supermarkets participating in the Fair Food Program, which governs purchases of tomatoes from Florida for 12 major US supermarkets and fast food corporations and covers 30,000 tomato workers The Fair Food Premium has resulted in significant wage improvements for tomato pickers http://fairfoodprogram.org/results/

# 5. Funding for science, research and development

**5.1** It is hard to find data about the scale of funding going into organic/agroecological research in comparison to advanced technical solutions, but it is likely to be a very small percentage. Dimbleby stated that more support should be directed towards agroecological methods, "which have been starved of investment up to now".<sup>39</sup>

**5.2** The loss of horticulture and potatoes research from the AHDB, following the horticultural levy members vote, has not impacted LWA members, as none were operating at a sufficient scale to be levy payers. Through work within the FVA, we understand that there is the potential for a British successor to the Fruit and Vegetable Aid Scheme, and we are asking for this to be accessible to small as well as large scale growers. While the issues facing various scales and types of horticulture are often different, there is much that could be learned from a transfer of knowledge between different sectors. One of the unexpected benefits of the workshops run as part of our horticulture E.L.M.S. Test and Trial, has been the peer-to-peer learning that has crossed boundaries of scale and organic versus conventional practice. We hope that in formulating a new generation of Fruit and Vegetable Aid scheme, the needs of all scales and types of grower will be included.

**5.3** There is also a strong appetite for farmer led research. The Innovative Farmers' Scheme,<sup>40</sup> initiated by the Soil Association, has been popular and successful in addressing the research needs of growers. By putting grower groups in touch with an academic who can guide them on research design, the quality of experiment leads to robust results. Growers benefit from the peer-to-peer learning when they meet 3-4 times during a trial and are in regular email contact. Innovative Farmers has been particularly beneficial in promoting transfer of knowledge between the organic and conventional sectors.

**5.4** LWA is the leading partner in the Agroecological Research Collaboration (ARC),<sup>41</sup> a group that aims to get the research needs of grassroots agroecological practitioners, including growers, onto the agendas of academic departments. We find ourselves the subject of increasing volumes of requests from research students, yet the focus of these projects rarely matches with our needs, as practitioners or policy advocates for a more sustainable horticultural system. We have run two successful events bringing together academics and practitioners, fielded enquiries from over 70 students and published guidance for students wanting to work with farmers and growers.

<sup>39.</sup> Dimbleby, H (2021). The Plan: National Food Strategy Independent Review, Recommendation 11 p168

<sup>40.</sup> Innovative Farmers: https://www.innovativefarmers.org/

<sup>41.</sup> The Agroecology Research Collaboration (A.R.C.) formed in 2020 and is composed of LWA, the Ecological Land Co-operative, the Community Supported Agriculture Network, Organic Growers' Alliance and Pasture for Life.

# 6. Benefits and challenges of implementing technological developments

**6.1** We recognise that there is an urgent need to invest in horticulture to increase its productivity and address pressing environmental challenges. These include the extreme weather resulting from climate change, managing pest and disease challenges as plant protection products are phased out and finding solutions to the labour shortages experienced in recent years.

**6.2** We are, however, concerned that the direction of travel in horticultural investment seems too focussed on cutting edge innovation and technical solutions, when existing solutions to many problems cannot be implemented due to growers not being able to afford them. Continuation on this pathway will only increase the barriers to entry in the horticulture sector, leading to ever greater concentration of supply among those producers who can afford to invest in the latest technology, while those without the means to reinvest leave the sector.

**6.3** A large amount of investment is being focussed on innovations such as automation, robotics, vertical farming and the new generation of glasshouses, which seek to create an entirely controlled (light, temperature, nutrients and pests) growing environment. Funding of £12.5 million through the Farming Innovation Scheme was announced in October 2022 for such innovations.<sup>42</sup> While the claims of what these new systems can achieve are impressive, in terms of high yields from a small area, efficient use of water and nutrients, there seems to be less data available on issues such as the embodied energy involved in creating these systems and what happens to infrastructure when it becomes outdated. Soil and sunlight are renewable resources, which if stewarded wisely form the basis for sustainable food production without costly concrete, glass, metal, plastic and technological infrastructure.

**6.4** We urge this committee to commission a full life-cycle analysis (LCA) comparing agroecological with vertical growing before recommending a wholesale roll-out of high tech growing. Investment of £12.5 million in agroecological start-up and development grants, training and innovative marketing systems, or farmer-led research to solve problems "in the field" could deliver valuable return on investment in terms of domestic resilience in fresh produce supply, savings from better public health and carbon sequestration.

**6.5** At present, large areas of glasshouses in the Lea Valley are being abandoned and the land for sold for development due to lack of workers and rising energy costs making them no longer commercially viable<sup>43</sup>. We urge this committee to take steps to protect existing horticultural infrastructure and high quality agricultural land from development, as a matter of national food security. Existing infrastructure, including glasshouses which contain high embodied energy in both glass and concrete, should be protected and repurposed, rather than allowing new developments to happen on greenfield sites.

42. See "New funding for agriculture, horticulture innovation and robotics", Defra website 11th October 2022
43. See "Cucumber capital growers selling up as Brexit and energy crisis hits Britain's vegetable industry", Guardian, 6th September 2022.

### 7. Resources and guidance available to organisations to help them to implement new technology and reduce their environmental impact

**7.1** While the Farm Equipment and Technology Fund (FETF) is technically available to market gardeners in England, to date it has not met the needs of most new entrants and small businesses. The two main reasons for this are its restrictive nature, in that only a limited number of pieces of equipment on a specified list can be purchased and few are appropriate for agroecological growers, and the fact that the fund only covers 40% of the cost of the equipment. The latter point means that the grant applicant must already have significant capital reserves in order to pay the 60% balance on the multiple pieces of equipment required at start-up.

**7.2** As an alternative to FETF, we believe Defra should look at the Welsh Government's Horticulture Start Up and Horticulture Development Grants. The Horticulture Development Fund lists a broad range of equipment that can be purchased with the grant and allows flexibility to use things not on the list where justified. Crucially, it allows for second hand equipment to be purchased, provided it is safe and has 5 years of usability left. This not only increases value for money in grant expenditure and supports the circular economy, but also improves the availability of suitable products. For growers with small, old tractors, the second-hand market has more to offer than the new market. The Start-up Grant allows for revenue expenditure as well. Importantly, these grants do not have a minimum land area to be eligible, but rather require evidence of running a horticulture enterprise (eg. invoices, receipts and/or accounts) for the Development Grant and a business plan for the start-up grant. The lack of an area-based threshold is important as many commercial agroecological growers operate on less than 3 hectares. We would recommend changing some aspects of these grants;<sup>44</sup> however, overall these grants are very welcome and are already supporting the establishment and development of agroecological vegetable farms.

44. For example, as with the FETF the Horticulture Development Grant only funds up to 40% of the purchase and requires payment in advance as the minimum grant size is £3,000 and it does not cover VAT. This means applicants would usually need at least £9,000 available in order to make the purchase and therefore it limits those who can benefit from it. The Start Up Grant covers 100% of costs, but the maximum available is only £3,000, which whilst welcome, will only be a fraction of the investment needed to start a new horticulture enterprise.

# 8. The impact of trade on businesses, the environment and bio- and phytosanitary issues

**8.1** LWA members tend to sell locally and regionally, so they are not targeting export markets. This does not mean, however, that they are immune to impacts from trade policy.

**8.2** Our main concern about the impact of trade is that prices for horticultural produce will continue to be suppressed by the availability of produce grown abroad to lower environmental and employment standards. While local organic produce is not in direct competition with imported conventional produce sold in supermarkets, the cost of living squeeze means that customers are extremely price sensitive. Allowing imports of cheap fresh produce creates an unlevel playing field and undermines incentive for enterprise and innovation in the UK.

**8.3** While the principle of comparative advantage, in terms of countries like Spain or Israel having a longer growing season than the UK, has led to our reliance on produce from these areas, it is unwise to rely on imports from countries which are water scarce. Climate change is exacerbating the threat of water scarcity. The supply of fruit and vegetables from countries likely to face high to extremely high water scarcity in the near future (2040) has increased from 41% to 54% over the period 1987 to 2013. 76% of the freshwater used in the production of fruit and vegetables supplied to the UK is withdrawn elsewhere including from countries with high risk of water scarcity such as Spain, South Africa, Chile, Morocco and Israel.<sup>45</sup>

**8.4** A trade policy that allows environmental standards for UK produce to be undermined by cheaper foreign imports, risks Defra coming under pressure to dilute regulations to improve the competitiveness of UK growers. It is essential for the future health of the environment that regulations are upheld, including those for clean water, air, biodiversity protection and worker welfare.

**8.5** A relaxation of phytosanitary checks to facilitate free movement of fresh produce, plants and other living material across borders could have a devastating effect on our members if diseases, pests or invasive species are introduced onto the islands of the UK. Non-native pests and diseases lack the natural predators that would control their spread. It is imperative that we avoid the situation where pests and diseases are introduced that can only be controlled by chemical means.

# 9. Lessons learned from horticultural policy and best practice

**9.1** The horticulture sector has, in recent decades, been seen as sufficiently financially successful to operate without requiring much Government intervention. Compared to most other UK farming sectors, horticulture has been seen as being "market facing" and therefore subject to "light touch" government intervention. While horticulture operates on less than 1% of the UK's agricultural land area, it generates £2.6 billion,<sup>46</sup> representing over 65% of the total income from UK agriculture (£2.7 billion/££4.1 billion - 2020 figures).<sup>47</sup> This apparent success has meant that horticulture has been "left to the market", an approach that may have worked in more affluent times, but is now leading to significant challenges, as will be outlined below.

**9.2** Interviews undertaken as part of the Growing the Goods E.L.M.S. Trial to understand the environmental issues that E.L.M.S.needs to address revealed that for several of the large scale growers, it is the demands of supermarkets that are requiring them to continue with practices that they are aware are damaging for the environment. For example, guaranteeing a salad crop will be ready within a given time window means 2-3 crops must be grown simultaneously, with all the resource use that entails, to spread risk of damage from weather or pests, while the push for cosmetic perfection makes it difficult to move away from chemical pest and disease control.

**9.3** To achieve the objective of a horticulture sector which is productive, sustainable and resilient; providing enough fresh produce to keep the UK population healthy and attracting a motivated and skilled labour force, a clear strategy is needed. Incentives must be offered to encourage practices which are good for the environment, regulation must be rigorously applied to prevent damaging practices and the market must be organised in such a way that growers are able to gain a price for their produce that rewards them sufficiently to reinvest.



Photo credit: OrganicLea

### **10. The effectiveness of Government planning and policymaking**

**10.1** The Government's "light touch" approach to horticultural policy, allowing the market to determine the level of horticultural production and distribution, management of natural resources (water, soil and inputs) and labour management has allowed UK horticulture to sleepwalk into a precarious situation.

### Diet related ill health

**10.2** Lack of a joined up food policy, including a "right to food", is leading to spiralling health costs due to obesity, diabetes, heart disease and many other diet related conditions. In his independent review for the National Food Strategy, "The Plan", Henry Dimbleby highlighted "the junk food cycle", a situation in which people are becoming ill due to lack of joined up policy to support healthy eating. When high calorie, unhealthy foods are cheaper and more accessible than fresh fruit and vegetables," it is not surprising that the incidence of diet related health problems have been increasing. Diets that are low in vegetables and legumes are responsible for 18,000 premature deaths in the UK each yea<sup>49</sup>. It is estimated that the NHS spent £6.1 billion on obesity-related ill-health in 2014 to 2015.<sup>50</sup>

### Domestic security in fresh produce

10.3 The Government's free market approach to food supply, has led to a situation where domestic production of fruit and vegetables has fallen, leading us to be reliant on imports for 43% of vegetables and 85% of fruit.<sup>5</sup> Since Defra records began in 1988, UK vegetable production has declined from 3.2m tonnes (when we were 83% self-sufficient in vegetables) to 2.5million tonnes. The picture for fruit is more complicated in that home production has increased from 435,600 to 576,200 tonnes between 1988 and 2021, but within that period, fruit production has fluctuated, peaking at 776,800 tonnes in 2015. Home production of fruit has dropped from 17.6 to 14.9% of total supply. This partly reflects changing dietary preferences, as fruit imports have risen to meet increasing demand for exotic produce, but these figures also represent a high level of import of fruit and vegetables that could be grown in the UK. Such a reliance on other countries to grow fresh produce that we could be growing in the UK appears unwise with climate change threatening to exacerbate water shortages in already water scarce countries. The Notre Dame Global Adaptation Initiative classifies the UK as 'least vulnerable' to climate change. In 2013, 32% of UK fruit and vegetable imports were from areas defined as climate vulnerable, a 60% increase since 1987<sup>22</sup> The time has passed when we can leave supply of a food type that is essential to good health to the vicissitudes of the market.

### Increase vegetable consumption and production

**10.4** Despite clear recommendations from Public Health England, The Food Foundation and the National Food Strategy Independent Review that people need to eat more vegetables, and prominent initiatives from the "Peas Please" campaign to encourage vegetable consumption,

<sup>48.</sup> Dimbleby H. et al (2021) The Plan: National Food Strategy Independent Review, p51.

<sup>49.</sup> Tobi, R., Wheeler, A., Gurung, I and Sutherland, J (2021) Veg Facts 2021. Food Foundation

<sup>50.</sup> Public Health England (2017) Health Matters: Obesity and the Food Environment. Guidance published 31st March 2017.

<sup>51.</sup> Defra (2022) Horticulture Statistics Data Set

<sup>52.</sup> Goudie, S (2021) Is the UK's supply of fruit and vegetables future proof. SHEFS Briefing No.1. The Food Foundation.

action from the Government on the production side has been lacking. If everyone in the UK were to eat five portions of fruit and vegetables per day we would need 10.8 million tonnes, and if they were to eat the current recommendation of 7-a-day, we would need 15.2 million tonnes. The UK's current production of fruit and vegetables is 3.1million tonnes, while supply (including imports) is 8.3million tonnes. There is clearly a need to dramatically increase production, if we are to avoid increasing our reliance on imports which, based on the evidence outlined above, would seem imprudent.

### Supermarket trading practices

**10.5** Another example of the Government's "light touch" approach leading to problems in the horticulture sector is its lack of regulation of supermarket trading practices. After significant lobbying from NGOs, such as Sustain, the Groceries Code Adjudicator was established in 2013 to enforce the Groceries Supply Code of Practice. Yet, this code only extends to direct suppliers, leaving many growers at risk of unfair trading practices, such as last minute order cancellations or unambiguous terms and conditions, which can unnecessarily bleed value out of an already small margin business operation. Without regulation to underpin best practice trading, primary producers have little power and many are afraid to speak out about these practices for fear of losing their markets.

**10.6** In recent months, as growers have experienced cost price increases rising by as much as 27%, they have found buyers unwilling to negotiate on prices, meaning that many are struggling to maintain margins.<sup>\*</sup> As a result many primary producers are reducing their cropping area or leaving the fresh produce sector altogether. These diminishing margins are already leading to a decline in production, at a time when, as the above paragraphs highlight, we need to be increasing fruit and vegetable production.

### **Call for action**

**10.7** While recent announcements about investment to improve technology in automation and a new generation of high tech glasshouses demonstrate the Government's intention to improve productivity, a more holistic approach is necessary. The LWA urges the government to follow through on its intention to "work with growers to develop a world leading horticulture strategy for England" which "will examine the diverse roles of small, large, and emerging growing models". The implications of an ongoing policy vacuum in the horticulture sector will extend far beyond horticultural production. A continuation of the decline of the horticulture sector, which has begun with the cost price increase and labour crises will have health implications for generations to come if a resilient supply of fresh, sustainably produced produce is not secured by a clearly laid out horticulture strategy.

# **11. Horticulture's contribution to mental and physical health**

**11.1** Agroecological horticulture benefits both mental and physical health, through improving diet by increasing the amount of fresh produce consumed, and through the fitness and mental health benefits of participating in horticulture through community supported agriculture, volunteering and other forms of public engagement. Public engagement is a central feature of agroecology, and many of our members are actively involved in urban and peri-urban farming, creating accessible opportunities for local people to visit, volunteer and learn on-site. Such opportunities bring physical and mental health benefits, and often act as an entry point into horticultural careers.

### Increasing access to fresh produce

**11.2** Most agroecological produce is sold either directly or via "farmer focused routes to market". Many customers tend to be people who are willing to pay a little more than the lowest supermarket prices, due to being informed about food production practices or having sufficient income. Since the covid pandemic, a new generation of "solidarity box schemes" have emerged, to enable those with sufficient income to subsidise boxes for people on a low income, to enable them to access organic fruit and vegetables. In a survey of 101 box schemes early in the first lockdown (April 2020), 10% were found to have created systems to help the economically vulnerable to access fresh produce.<sup>53</sup>

### Increased consumption of fruit and vegetables

**11.3** Among those who buy produce from fruit and vegetable box schemes, consumption tends to be higher than the average for the UK population, which is 3.9 portions per day<sup>54</sup>A survey of 369 "fruit and veg bag" customers from Growing Communities in Hackney, of whom 15% are on a low income, found that 83% tend to eat 5-10 portions per day, while 19% are achieving "7-a-day". In addition, respondents stated that they were eating more seasonally and a wider range of fresh produce, cooking more from scratch and using less packaging. Other interesting statistics from this survey include that 97% walk or cycle to collect their produce bag from collection points, and 70% feel a stronger sense of community since joining the veg scheme.<sup>55</sup> The CSA Network Annual Survey 2022 found that 79% of people who are CSA members have changed their eating patterns as a result of buying a weekly vegetable share.

### **Connection to food**

**11.4** Agroecology often blurs the boundary between "the producer" and "the consumer". This is most accentuated in Community Supported Agriculture (CSA) and peri-urban horticulture, in which "members" or volunteers actively participate in the growing and/or harvesting of produce. Case studies<sup>56</sup> provided by the CSA Network UK highlight how customer involvement and volunteering is a key feature of these farms. Urban and peri-urban farms offer valued opportunities for people without gardens and lacking in the skills and confidence to take on an allotment, or simply unable to access one due to long waiting lists, to grow food and spend time in nature. LWA is a partner in Fringe Farming,<sup>57</sup>an initiative established by Sustain to work with a new generation of farmers and growers looking for suitable sites to meet increased demand for healthy, ecological and culturally appropriate food in five cities across the UK.

- 54. Tobi, R., Wheeler, A., Gurung, I. and Sutherland, J. (2021) Veg Facts 2021. Food Foundation, p4
- 55. Growing Communities Blog (16th November 2021) What you said: Veg scheme annual survey.

57. Fringe Farming is a collaboration with partners across the UK to understand barriers, identify land opportunities and local actions,

<sup>53.</sup> Wheeler, A. (2020) Covid 19 UK Veg Box Report. Food Foundation.

<sup>56.</sup> The CSA Network UK website displays 10 case studies which illustrate how members get involved in growing.

and develop national policy to enable agroecological farming at the edge of cities as part of a green economic recovery.

### **Benefits of Volunteering**

**11.5** It might be argued that a reliance on volunteers undermines the case that these are commercially viable businesses. However, managing volunteers, many of whom have unique health or personality needs, is a skill and a service in itself. To clarify, we are not talking here about care farms, which are specially set up to work with paying "clients" with physical or mental health problems, but about businesses which offer public engagement as an integral part of their commercial production of fresh produce. In these cases, a complex trade is happening, in that the volunteers are offering labour, sometimes in return for produce. However, the volunteers are also learning horticultural skills "on the job", and are benefiting from the companionship, community, pleasant surroundings and fitness benefits of doing physical work. While the market gardeners benefit from the help offered by the volunteers, they also offer a "pastoral" or "hosting" role to ensure that the experience is a pleasant one. They may need to act as an informal counsellor, teach people with little knowledge of horticulture and often provide a cooked meal for volunteers. Sometimes funding is available, usually only for a year or so, to support the "public engagement" role of these market gardens, but often the growers are having to juggle their volunteer hosting role alongside being a commercial grower.

**11.6** Our evidence of the health benefits of volunteering at CSA's and peri-urban farms is from experience, rather than formally documented research, as it appears that little research has been conducted in this subject. We have tried to remedy this, by commissioning an MSc student to undertake a study into the health and welfare benefits of volunteering on peri-urban farms. The dissertation is not yet complete, but early results indicate that volunteers feel that helping at two urban farms, enhance their health and well-being by "extending social networks, generating a sense of community and belonging, providing the opportunity to contribute to a worthwhile project, learn new things, and having increased contact with nature". Our knowledge of the health benefits of agroecological volunteers is also gathered from conversations with our members, participation in the Fringe Farming Initiative, interviews and workshops with peri-urban participants in the Growing the Goods E.L.M.S. Trial, and study tours to Organiclea and Dagenham Farm in NE London, with members of staff from Defra.

**11.7** In July 2021 an LWA intern undertook a literature review on "How public engagement in urban and peri-urban agricultural enterprise affects health, well-being and consumption habits". Although the majority of the literature focussed on allotments and community gardens, many findings translate to the experience of volunteers at commercial peri-urban gardens. Notably, the dietary impacts of community gardening included "increased consumption of vegetables, trying new vegetables, and decreased processed food and meat consumption, as well as reduced body mass indices. Factors that contributed to these dietary changes included knowing that their produce was grown without synthetic chemicals, preferring the taste and freshness of the produce they grew and an emotional connection to their vegetables. Gardening was also associated with some aspects of food security". From a mental health perspective, community gardening was found to promote relaxation and happiness, and in some cases enable people with mental health.

**11.8.** While we are keen to emphasis that peri-urban farms and CSA's are not allotments, but commercial businesses and social enterprises, a recent study from Brighton and Hove Allotment Federation<sup>59</sup> seems relevant here. It summarised the financial benefits that allotments can bring to a city in terms of health and environment cost savings. Of particular note was the statement that, "If access to allotments prevents just one person from suffering a Stress, Depression or Loneliness related illness, the service has potential to save local health providers and the wider economy £3408, £13,211 and £9,900 respectively". Other translatable benefits include cost savings of £14,500 resulting from a reduction in plastic packaging and food waste, and soil that stores 578 more tonnes of carbon than grassland, with a value of £519,483 for 2311 full size plots (25 sq m), and supporting between between 4 and 54 times more bees and other pollinators than other types of council managed land.



59. Mayor, J. and Ripoll, S. (2021). An outline business case for allotments in Brighton and Hove. Brighton and Hove Allotment Federation. The report and an infographic can be downloaded from the bottom of the BHAF website

## **12. Closing comments**

**12.1** In your call for evidence, Lord Redesdale, the Chair of the House of Lords Horticulture Sector Committee stated, "Horticulture is ..... a fundamental component of a secure food supply, supports the wellbeing of millions of people, and could provide innovative solutions to the challenges presented by climate change. Despite this, horticulture has been continually overlooked and undervalued. The industry has long been calling for more support to realise these benefits. Our inquiry will explore what is needed to ensure the sector can lead the country towards net zero, deliver skilled green jobs, and innovate to put the UK on the map as a science superpower."

**12.2** We welcome your recognition that the horticulture sector needs more support to realise these benefits. Our submission has aimed to demonstrate that agroecological horticulture is well placed to deliver not only net zero, but carbon negative horticulture, attract a new generation of workers and provide the people of the UK with a high quality, tasty and resilient supply of fruit and vegetables. While currently representing a small percentage of overall supply, organic and agroecological growers have experienced significant growth in numbers in recent years and are working hard to scale up further. Our efforts are held back by barriers such as appropriate training opportunities, secure access to land, capital grants and the downward pressure on prices exerted by the market for conventional fruit and vegetables (influenced by cheap imports of produce from countries where labour and environmental standards are lower than in the UK). Furthermore, through public engagement, we believe that agroecological horticulture is well placed to address dietary, physical and mental health issues, and help towards a recovery of biodiversity through a "land sharing" model of production.

**12.3** We urge the House of Lords Committee to encourage an ambitious and proactive, multidepartmental horticulture strategy. Significant future health savings could be achieved by such a joined up approach. To increase supply so that the whole population can access the recommended "7 portions a day", we need a policy that integrates increased productivity with sustainability, prioritises domestic production over imports, enables growers to generate a reasonable return through resilient and remunerative markets and attracts new entrants to a rewarding career with a bright future.