Food System Impacts of Covid-19 – Research Brief 3

The Fruit and Veg Sector

SOME PRE-COVID CONTEXT

Imports/Exports

When considered together, about three-quarters of the fruit and vegetables we consume in the UK are imported. While most (just) of the vegetables we eat *are* domestically produced (53% in 2019), when it comes to fruit, only a fraction is grown in the UK (16% in 2019). To satisfy domestic appetite the UK *imported* 6 million tonnes of fruit and vegetables in 2019 worth £6.45 billion. For comparison, in the same year, the UK *exported* just 305,000 tonnes, worth £285 million.[1]

The top three vegetables the UK imports are onions, tomatoes and sweet peppers. The majority of these three key vegetables come from, Spain and the Netherlands while the Irish Republic accounts for over half of all mushroom imports. The top three fruits the UK imports are bananas, with most coming from Colombia and Costa Rica; grapes, mostly from South Africa and Spain; and apples with most UK imports coming from France and South Africa.[2]

Declining Self-Sufficiency

With a strong, year-round appetite for fruit that either doesn't grow well in the UK (e.g. bananas and grapes) or has a limited growing season (e.g. soft fruit such as strawberries), it is not surprising that the UK's self-sufficiency in fruit is low, and has been for a number of decades. 2019's figure of 16%, for example, is fairly typical of the annual share of the UK's fruit supply domestically produced over the past 30 years. Perhaps a little more surprising is the UK's relatively low level of vegetable self-sufficiency. 30 years ago 83% of the veg we ate in the UK was domestically produced. By 2019, as noted, that figure had declined to 53%.

UK Consolidation and Migrant Labour

This same 30-year period also witnessed considerable consolidation of UK fruit and vegetable supply chains, with large-scale production being processed and packed in industrial pack houses and transported to centralised warehouses for supermarket distribution.[3] The UK fruit and veg labour market was transformed too, with many employers in the sector increasingly reliant on seasonal migrant workers from Eastern Europe to pick and process produce.

Acute Vulnerability

With low and declining levels of self-sufficiency, a lack of diversity in the sourcing of imports (in 2019, for example, 96% of vegetable imports came from either Spain or the Netherlands), and with a labour model dependent on seasonal migrant workers, the UK fruit and vegetable sector seemed potentially extremely vulnerable to any significant and sustained supply chain disruption, and for some, illustrative of the insecurity of the UK's food system as a whole.[4]

COVID: IMPACTS and RESPONSES

Pre-lockdown 'Panic' Buying

In early and mid-March 2020, in anticipation of an imminent lockdown, UK consumers began to buy more fruit and vegetables. The increase in volume sales of *fresh* fruit and veg was relatively modest, up 14% on the previous year, the lowest for all grocery products.[5] Demand however, for *processed* fruit and vegetables increased significantly as consumers sought to stock up on shelf-stable and long-life products. Sales of frozen veg, for example, were up 43% over the four week period to the 22nd March 2020 compared with the same period the previous year.[6] Sales of tinned tomatoes, three-quarters of which are sourced from Italy, reportedly surged by 30% during the first few weeks of the Covid crisis, leading some suppliers to ration stocks to supermarkets.[7]

Covid-related Acute Labour Supply Issues

Each year, according to the British Growers Association, the UK horticultural sector requires around 70,000 seasonal workers to pick and pack UK grown fruit, vegetables and salads. At least 90% of these seasonal workers are migrant workers, and at least 90% of these migrant workers, pre-pandemic, came from the EU. By mid-March 2020 with Covid related travel and movement restrictions already in place across much of Europe and with similar restrictions looking likely in the UK, and with the start of the picking season just a few weeks away, many were warning that an acute horticultural labour supply issue was in the making.

Initial responses, to what the NFU estimated was a 50,000 shortfall in seasonal workers, focused on domestic recruitment as the solution to the labour shortage problem. On 17th March agricultural recruiters, HOPS, Concordia and Fruitful Jobs introduced the 'Feed the Nation' campaign. A week later, the UK government in partnership with a consortium of UK based food businesses launched the 'Pick for Britain' campaign. Both initiatives were set up to encourage and facilitate recruitment of local UK workers, both received considerable media coverage, but both were ultimately to have a limited impact.

While there was certainly some interest in the schemes, take up rates remained extremely low. By mid-April the 'Feed the Nation' campaign, for example, had received 50,000 expressions of interest but had only managed to fill 150 roles.[8] Despite further industry calls for a domestic 'land army' of workers to support farmers in feeding the country and the government urging furloughed staff to fill the migrant labour gap, by mid-May the NFU were suggesting farms still needed up to 40,000 UK workers to harvest fruit and veg.[9]

Failure to recruit or retain significant numbers of UK workers can be attributed to a number of factors. Often farms were in isolated rural locations, away from local labour pools and public transport links. Farm work also had to compete with various similarly paid roles in more accessible and convenient locations e.g. town centre supermarkets and in delivery. The fact that harvesting fruit and vegetables is also a skilled and extremely physically demanding job was also a significant impediment to domestic recruitment. Many local workers simply did not have the physical capacity or necessary experience to undertake tasks at speed, and over long periods of time.[10]

> ***EXPERT PANEL QUOTE***
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> *"Pick for Britain was just one player in a complicated and over-crowded recruitment field. [But] as a combined result of all initiatives, most producers got the numbers they needed."*
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> *Expert Panel member (October 2020)*

Despite domestic recruitment not being the solution many hoped it would be, initial predictions that millions of pounds' worth of produce would be left to rot in fields, did not come to pass. By June, and the start of the peak picking season, a steady flow of migrant workers had started arriving from Eastern Europe. Some arrived under their own steam, others were flown in on industry chartered planes, and as the season progressed, and restrictions were lifted, more and more seasonal migrant workers were able to enter the UK. There was also more horticultural migrant labour already in the UK than originally estimated, as many late-winter flower harvesters looked for ongoing work. And while national domestic recruitment schemes may have had a limited impact, some more localised, farm led, initiatives reported greater success in employing local UK workers. The combined result of the above meant that, as one member of the project's Expert Panel remarked, 'most producers got the numbers they needed' to ensure that 2020's fruit and vegetable crop was picked and packed. [11]

Costs and Prices

With a limited supply however, the cost of labour inevitably rose. A report commissioned by the NFU, British Apples and Pears, British Summer Fruits and the British Growers Association, for example, found that Covid had caused a 15% increase in the cost of labour for fruit and vegetable producers associated with the cost of new recruitment campaigns, additional training due to a lack of return workers from previous years, and the purchase of new accommodation to meet quarantine requirements. These Covid-related labour cost increases also came on top of a 34% rise in labour costs that the sector had experienced between 2016 and 2020.[12]

Covid-related labour shortages also had an impact on key UK import regions. These labour issues, combined with various other Covid-related logistical problems, including a shortage of refrigerated containers, restrictions on sea transporters, and a lack of air freight, contributed to a 10% reduction in imports of fruit and vegetables into the UK between March and May 2020 compared with the previous year.[13]

With supply unable to keep up with retail demand and production and importation costs rising steeply, the price of many fruit and vegetables also increased significantly. Analysis by the LSE of fruit and vegetable prices during March and April 2020, for example, showed that the price of onions had risen 18%, tomatoes 13%, small oranges 16%, and pineapples 10% compared with same period the previous year.[14]

New Routes to Market

While many fruit and vegetable producers who supplied the retail sector benefitted from increased retail demand for their produce, those who supplied the hospitality and education sectors had to contend with a sudden and massive reduction in demand for their produce as cafés, pubs, restaurants and schools simultaneously all closed with the imposition of lockdown 1. Overnight, many producers, both large and small-scale, had little alternative but to find new markets and/or new routes to market for their produce.

Remarkably, however, many producers *were* able to respond both quickly and extremely effectively and find alternative markets and sale routes. Most commonly, producers pivoted to providing veg boxes, direct sales and home deliveries. Some established such schemes from scratch, others increased existing capacity. Some producers turned to one or more of the many 'brokering' initiatives that were quickly established to help farmers find alternative routes to market and connect producers and consumers,[15] others preferred to plough their own furrow and develop bespoke B2C (business to consumer) platforms to sell their own boxes.

EXPERT PANEL QUOTE

"In terms of new markets for wholesale and food service businesses, those that were able to adapt were probably defined by not much more than having the get up and go, the initiative and drive. In the early days many didn't make much money, but many of those who persisted have been able to achieve huge success and some of them now have new business operations they didn't have on 1st March, which will probably evolve and develop as permanent changes."

Expert Panel member (October 2020)

A Veg Box Boom

With increasing levels of home-cooking, and many consumers self-isolating or looking to avoid the crowds seen in large supermarkets, demand for home delivered fresh fruit and vegetables significantly increased leading to a Covid-related veg box boom.

The results of a survey carried out by the Food Foundation, for example, found that sales of veg boxes increased by 111% during the six weeks up to mid-April 2020. Interestingly, it was smaller box schemes (i.e. those supplying up to 300 boxes per week) which experienced the highest rates of growth, increasing by an average of 134%.[16]

This unprecedented increase in demand resulted in many farmers reaching capacity of supply. According to the same survey, 82% of veg box schemes had waiting lists and were closed to new orders, with the average number of people on a waiting list reported as being 160.[17]

While the Food Foundation's research suggested that many local, small-scale veg box schemes were thriving and doing particularly well, larger, more established schemes seemed to be doing well too. Riverford, for example, saw demand for their veg boxes skyrocket, reporting the highest number of orders ever seen outside of Christmas, while Abel and Cole saw demand increase by 25% for their veg boxes.

Covid and the Consumption of Fruit and Veg

An increase in both retail and B2C fruit and veg sales is suggestive of an increase in the general consumption of fruit and vegetables too, and there is some evidence that this was indeed the case. According to a report by EIT Food for example, based on research carried out in September 2020, UK consumers increased their consumption of fresh fruit and vegetables by 33% and 31% respectively.[18] While the results of a survey carried out by IGD, also in September 2020, found that over half (51%) of respondents reported eating more fruit and veg because of lockdown related changes to their diets.[19]

But not everyone was willing or able to eat more fruit and veg during Covid's first wave. The results of a study by Northumbria University's Healthy Living Lab, published in June 2020, for example, revealed that there was a massive *decrease* in fruit and vegetable intake reported by children receiving free school meals. Across a three-day period immediately following the UK's first Covid-19 lockdown, 45% of pupils who would have received free school meals stated that they had eaten no fruit over the previous three days at all, while 55% reported having eaten no vegetables over the same period.[20] Research from the University of East Anglia into lockdown related lifestyle behaviour changes also found that respondents to their survey were eating, on average, about one portion *less* of fruit and veg per day during the first 30 days of lockdown 1 compared to pre-pandemic consumption.[21]

ANALYSIS – Nutrition + Health

A meta-analysis undertaken by Isaacs et al. into studies of lockdown-related **changing food practices and their implications for nutrition and health** revealed a mixed picture. Some research found that people – typically those on higher incomes, working from home, and in households without children – reported cooking homemade meals more often, eating more fruit and vegetables, substituting sugary drinks for water, and consuming less fast food, baked goods, and alcohol. Other studies, however, identified less favourable dietary trends such as increased snacking, greater consumption of foods high in salt, sugar and saturated fats, overeating and reduced intake of fresh products, including fruit and vegetables. These changes were more likely to be reported by those with pre-existing mental health conditions, lower levels of educational attainment, and lower socioeconomic status.[22]

This **mixed picture** of both positive and negative food-related experiences and outcomes, was also picked up in a study by Snuggs and McGregor, who observed that while some people appeared to have thrived during lockdown, with healthier lifestyles and decision-making, others gained weight, lacked varied diets and struggled with food expense.[23]

The stark distinction between those who had largely positive food-related experiences and associated health outcomes and those who had largely negative experiences and outcomes as a result of Covid-19 control measures, was also, again, clearly evident in the emerging results of another research project. Outlining their interim findings, Thompson et al. reported that results suggested that Covid-19 and the mitigation measures put in place from March 2020 (e.g. 'lockdown' and social distancing) served to '**amplify existing dietary health inequalities**'.[24]

Taken together these studies paint a fairly clear and consistent picture which shows that the relatively more secure financially were able to spend time addressing and improving their dietary health, whilst **those struggling financially or in economic hardship experienced their diets worsening**.

So what was it? Did lockdown lead to people eating *more* or *less* fruit and vegetables? In the context of the impact of Covid on fruit and veg consumption, a generalisation either way is not that helpful as it oversimplifies and masks a much more complex and important story about people's very different experiences of, and responses to, the pandemic. Some people did consume more fruit and vegetables, were more mindful of their diet, and were able to adopt a range of positive lifestyle behaviour changes. But many others didn't. Many had neither the opportunity nor the means to access sufficient fresh fruit and veg, and indeed in some cases, enough food to feed themselves or their family. [See Commentary]

Fruit and Veg Going Forward

Although the surges in demand that were seen at the beginning of the pandemic and lockdown 1 levelled-out over the summer of 2020, in an industry podcast published in the autumn of that year, on the eve of lockdown 2 in the UK, it was suggested that two of the new trends that had developed in response to the pandemic were likely here to stay for the long-term: one was the continuing expansion of online retail; the other was home delivery. Commenting at a similar time, one of our Expert Panel members suggested that the move to home delivery appeared to be particularly persistent in fruit and veg compared to other sectors, noting a number of new box scheme businesses that had emerged during the pandemic that were targeted at specific markets like young mums or families or were focussed on specific products or regions.[25]

Two years after it came to prominence as an acute Covid-related issue for the sector labour shortages continue to be a chronic problem for many fruit and veg producers. In the autumn of 2021 the FT reported, for example, that many growers were planning smaller harvests for 2022 after unprecedented labour shortages led to widespread wastage of produce during the 2021 season. Farmers reported that the government's pilot visa scheme that was introduced to admit seasonal workers after Brexit had not supplied the necessary number of pickers.[26] With two-thirds of workers hired under the scheme in 2021 coming from Ukraine, the fruit and veg sector's labour shortage issues do not look as though they will be resolved any time soon.

KEY RESOURCES

https://britishgrowers.org/

REFERENCES

1 Defra (2020) *Horticultural Statistics 2019* available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003948/hort-report-17jul20.pdf

2 Ibid.

3 Ibid.

4 Garnett P, Doherty B, & Heron, T et al. (June 2020) 'Vulnerability of the United Kingdom's food supply chains exposed by COVID-19' *Nature Food* (1) https://www.nature.com/articles/s43016-020-0097-7

5 https://foodfoundation.org.uk/fruit-and-vegetables/?paged1=6&paged2=1

6 https://www.foodnavigator.com/Article/2020/04/28/Lockdown-drives-frozen-food-sales-up-28-in-UK

7 https://www.theguardian.com/business/2020/apr/17/suppliers-ration-stocks-tinned-tomatoes-after-surge-demand

8 https://www.ft.com/content/e3713342-c883-483a-956f-41cd6ec5367e

9 https://www.theguardian.com/business/2020/may/20/farms-still-need-up-to-40000-uk-workers-to-harvest-fruit-and-veg

10 Barbulescu, R. and Vargas-Silva, C. (2020) *Seasonal harvest workers during Covid-19* available at https://ukandeu.ac.uk/seasonal-harvest-workers-during-covid-19/

11 Food System Impacts of Covid-19 project, Expert Panel meeting 20th October 2020, Meeting Notes available at: https://blogs.exeter.ac.uk/foodsystemimpactscv19/files/2021/05/Expert-Panel-Meeting-4-20.10.20-Redacted-Notes.pdf

12 https://www.britishapplesandpears.co.uk/covid-19-adds-up-to-15-on-labour-costs/

13 https://www.freshplaza.com/article/9239297/the-uk-imported-much-less-fruit-and-vegetables-in-the-first-three-covid-19-months/

14 https://blogs.lse.ac.uk/businessreview/2020/06/22/the-uks-fresh-produce-supply-under-covid-19-and-a-no-deal-brexit/

15 For example, https://farmstofeedus.org/

16 https://foodfoundation.org.uk/publication/covid-19-uk-veg-box-scheme-report

17 Ibid.

18 https://www.eitfood.eu/news/eit-food-report-reveals-lasting-impact-of-covid-19-pandemic-on-european-food-behaviours

19 https://www.igd.com/about-us/media/press-releases-and-blogs/press-release/t/igd-research-over-half-of-consumers-claim-to-have-eaten-more-fruit-and-vegetables-in-first-lockdown/i/27355

20 https://www.northumbria.ac.uk/about-us/news-events/news/massive-decrease-in-fruit-and-vegetable-intake/

21 Health behaviour change during the UK COVID-19 lockdown: findings from the first wave of the C-19 health behaviour and wellbeing daily tracker study — University of East Anglia (uea.ac.uk)

22 Isaacs, A., Gallagher Squires, C., and Hawkes, C. (2021) 'How Is COVID-19 Shaping Families' Relationships With Food and the Food Environment in England? A Qualitative Research Protocol' *International Journal of Qualitative Methods* https://doi.org/10.1177/1609406921991371

23 Snuggs, S. and McGregor, S (2021) 'Food & meal decision making in lockdown: How and who has Covid-19 affected?' *Food Quality and Preference* (89) https://doi.org/10.1016/j.foodqual.2020.104145

24 Thompson, C., Hamilton, L., Dickinson, A., Fallaize, R., Mathie, E., Rogers, S., and Wills, W. (2021) *The impact of Covid-19 and the resulting mitigation measures on food and eating in the East of England: Interim Report* pg. 2 https://doi.org/10.18745/pb.23113

25 Food System Impacts of Covid-19 project, Expert Panel meeting 20th October 2020, Meeting Notes available at: https://blogs.exeter.ac.uk/foodsystemimpactscv19/files/2021/05/Expert-Panel-Meeting-4-20.10.20-Redacted-Notes.pdf

26 https://www.ft.com/content/ee933d30-43fc-47ff-b00f-8e7b1c695516