



**A Nuffield Farming Scholarships Trust
Report**

Award sponsored by

Worshipful Company of Butchers



**What part can farmers play in
reducing food poverty in the UK?**

Rob Mercer

August 2017

**NUFFIELD
UK**

NUFFIELD FARMING SCHOLARSHIPS TRUST (UK)

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A Nuffield (UK) Farming Scholarships Trust Report



Date of report: August 2017

*"Leading positive change in agriculture.
Inspiring passion and potential in people."*

Title	What part can farmers play in reducing food poverty in the UK?
Scholar	Rob Mercer
Sponsor	Worshipful Company of Butchers
Objectives of Study Tour	To learn about how food aid projects work in other developed countries and to gain an understanding of social projects generally
Countries Visited	Philippines, Singapore, Hong Kong, China, Canada, USA, Brazil, Spain, Denmark and the Netherlands
Messages	<ul style="list-style-type: none">• There is huge inequality between the wealth of countries and the people within those countries• Economic poverty contributes to food poverty• Food poverty is an issue in developed world countries, including the UK, manifested as both hunger and malnutrition• The farming industry should play its part in ensuring a well fed and healthy nation

EXECUTIVE SUMMARY

My Nuffield Farming study has evolved from being focused on adding value and developing a pig business to looking at how I can contribute to challenges around food poverty and healthy eating in this country.

Research has shown me that food security in families is a real issue in the UK and that it is often linked to poverty. There are 8 million people in UK suffering from food insecurity ⁽¹⁾. Food poverty is also to do with the quality of people's diets. On average the poorer people are, the worse their diet, and the more diet-related diseases they suffer from. Poor diet is related to 30% of life's lost years according the Faculty of Public Health ⁽²⁾ and poorer people are more likely to die younger as a result of poor diet. Not only is this not right in a country with so much wealth as the UK but it also contributes a huge economic toll both on the NHS and the wider economy. Food poverty could become an increasing problem in the UK as food prices increase, incomes stagnate and household fixed costs increase. Food is seen by some people as a flexible expense and not only can people go without food at times but they can substitute healthy food for cheaper, poor quality food which may have consequences on the health of the individual.

My focus has been to set up a charity promoting fresh produce and healthy eating to families from poorer demographics, influencing them to eat more fresh fruit, vegetables and meat and less processed food. The charity "Farm Fresh Revolution" distributes fresh fruit, vegetables, meat and eggs to parents whose children are at primary schools where a high percentage of the families have an income of less than £12,000 per year.

The charity currently works with 6 schools in Staffordshire with the aim of increasing this number to 12. The plan is to gather research statistics from this charity over the next academic year on the impact this is having and to try and come up with a proposal for the industry, on how we can replicate this around the UK.

Information on the charity can be found at www.farmfreshrevolution.com

I hope that through setting an example of how a farmer can contribute to alleviating food poverty, I can help influence policy makers and contribute to society.

Note: References are given in full at the end of this report

Contents

EXECUTIVE SUMMARY	
1. Personal Introduction	1
2. Background to my study topic	3
2.1 My study title	3
2.2 Food production	4
2.3 Today's world	4
2.3.i. George Cadbury	7
2.3.ii Jesse Boot	7
2.3.iii William Hesketh Lever	7
2.3.iv Bill Gates	8
2.4 The 'triple bottom line'	8
2.5 World hunger	8
2.6 UK distribution of wealth	8
2.7 Hunger in the UK	10
2.7 What is food poverty?	11
3. My study tour: where I went and why I chose those countries	13
4. Lessons from abroad	14
4.1 USA	14
4.2 Food banks and food pantries in the USA	14
4.3 The Church of the Latter Day Saints and their approach to giving	17
4.4 Food Bank in Brasilia	17
4.5 Cren	18
4.6 Other Brazilian social projects	20
5. Examples of food charities in the UK	22
5.1 Trussel Trust (22)	22
5.2 Fare share (23)	22
5.3 Real Junk Food project	22
5.4 Alexander Rose charity (25)	22
5.5 Feedbackglobal (26)	23
6. Farm Fresh Revolution	24
6.1 Farm Fresh Revolution	24
6.2 Farm Fresh Revolution costs	26

6.3 Volunteers.....	27
6.4 How has it gone?.....	27
7. Conclusions.....	30
8. Recommendations.....	31
9. After my study tour.....	32
10. Acknowledgements.....	33
References.....	34
Appendix 1.....	36
Appendix 2.....	37
Appendix 3.....	39
Appendix 4.....	43
Appendix 5.....	44

DISCLAIMER

The opinions expressed in this report are my own and not necessarily those of the Nuffield Farming Scholarships Trust, or of my sponsor, or of any other sponsoring body.

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1. Personal Introduction

I am a 4th generation farmer based in Staffordshire in England. I farm with my father and brother. We have a mixed farming business comprising of arable, pigs, chickens, meat distribution, renewables, environmental schemes and office rentals.

My main area of focus within the business is pig farming. The farm has always been involved with pigs. My grandpa Alec Mercer had been a passionate breeder of pedigree Large Whites. My father Roger had farmed pigs intensively indoors with low cost of production being the focus. When I returned home to the family business after studying agriculture at



Figure 1: Rob Mercer, the author

Newcastle University in 2002, we had greatly reduced our pig farming activities. I was keen to go into pig farming but into outdoor – as opposed to indoor - production and focus on the welfare of the animals and on the environment. I was also keen to be in control of marketing my pigs.

The pig business now comprises 8000 outdoor sows and buys in weaners from a further 3000 outdoor sows. We produce 600 free range fat pigs per week which we sell to butchers around the country via our own meat distribution business and which we brand under the name “Packington Free Range.” We then market 4500 fat pigs per week which have been reared on third party farms, all on deep bedded straw and low stocking densities. These are marketed as outdoor-bred pigs and are RSPCA-approved. These pigs are utilised in specific supermarket supply chains.

Alongside the farming business my wife Sally and I have taken an increasing interest in socially based projects. The main focus of these has been an education project for young school children (*Appendix 1*). During the summer term and the first half of the autumn term we host school visits every day and give school children an introduction to farming and the countryside, whilst enjoying a fun, free day out. This last school year we have hosted 92 school visits and over the past 3 years we have hosted on farm or spoken to over 13,000 school children in school. During the winter months we have a deliverer who goes into schools to talk to pupils about where their food comes from and healthy eating. This education project forms part of a wider education charity called FarmLink (www.farmlink.org.uk/). I had a desire to develop further the social aspect of the business.

I have always been aware of the Nuffield Farming Scholarships Trust as an organisation, with both my father Roger and brother Alec being Nuffield Farming Scholars. Over the past 7 years I have been very focused on driving my business forward and achieving goals which I set myself in 2009 as part of a 7-



year plan. I felt a Nuffield Farming Scholarship would give me an opportunity to decide on my future plans and help give me the right direction going forward.

My original study topic was “How to develop and add value to a pig business whilst contributing to society”. However, more and more I realised that my great interest lay in physically alleviating food poverty within the UK. So, with the hugely appreciated support of my sponsor, The Worshipful Company of Butchers, this title was changed to reflect my more targeted concern:

“What part one farmer can play in reducing food poverty in the UK”



2. Background to my study topic

2.1 My study title

I was awarded my Nuffield Farming Scholarship in September 2015 and my original study topic was “How to develop and add value to a pig business whilst contributing to society”. I attended the CSC in Cavan, Ireland in March 2016 and then started on my travel plans. I visited Spain and Denmark looking at pig farms and meat businesses and spent time in the Netherlands looking at a large veal business. I had plans in the autumn of 2016 to spend 3 weeks looking round the major meat processing companies in North America, and planned to spend 3 weeks doing the same in South America. I have always had a strong interest in running my business in a socially responsible way, and I was keen to learn how to develop this further. But fundamentally my travel plans were originally focused on learning how to grow my business into an increasingly larger and more profitable operation, and were less concerned with social responsibility.

I found my three weeks in Denmark, Spain and the Netherlands interesting but not overly stimulating. Was I, on my travels, going to discover any magic bullets about how to run my business? There were common themes such as being focused in specific areas of expertise and reinvesting solely in those areas. This was personified by the veal giant the **Van Dree** group. They had a hugely successful and integrated business farming, slaughtering and processing veal as well as producing the milk powder to feed the calves. They operated purely in the veal field and had seen huge growth although I did feel were exposed to the volatility of one market. The **Jorge** group are one of the largest meat producers in Spain and were pork farmers, slaughterers, processors and ham curers. Their pig farms were focused on low cost production and they were doing a great job of it, weaning 32 pigs weaned per sow per year over a vast number of sows. Their processing facilities were state of the art, with some superb technological innovation and they were adding huge value to the carcass through the production of Iberian ham. One lesson to take away from the Jorge group was that we, as a small business, would not be able to compete with the cost savings and efficiencies post farm gate of these larger, highly advanced businesses. Interestingly both the Jorge Group and Van Dree group were family businesses. The Jorge Group was stated in the 1940s by Thomas Samper Albala, and the Van Drie Group started in the 1960s by Jan Van Drie.

The pig industry in Denmark was excellent. Their genetics programme which was industry-owned is the best in the world and also offers a unified product for the Danish industry and their pork offering. They had made significant inroads into the reduction of antibiotics and those in the UK who still crow about Red Tractor pork being better than its Danish competitors are, in my opinion, wrong.

I am sure I would have learned more about successful meat businesses in the Americas, and would have gained further insight into what makes a business successful and what makes a business fail, but I couldn't help feeling “what's the point?” I have a good business in the UK which I am successfully growing but do I want that to be my sole focus? Do I want my focus to be purely on business growth and wealth creation? I am very fortunate with what I have, and for me a key motivation is that I want to contribute in some small way to a better world. Even if the contribution is very small I still want to contribute.



2.2 Food production

During the CSC in Cavan there were some strong recurring messages. There would be 11 billion people in the world by 2100 ⁽³⁾. How are we as the farming industry going to feed them? Especially as a growing proportion of the world have an increasing desire to eat meat. We can as farmers undoubtedly produce more food. There are technologies and agricultural practices at our disposal to help us do this. These could include precision farming, embracing the GM technology which is permissible, empowering and transferring knowledge to less developed countries to improve their agricultural output, developing protein farming such as insects into more main stream agriculture or even producing meat-free burgers.

On my travels it was also very clear that government support for certain segments of the farming industry leads to a lack of innovation and productivity. I felt the dairy industry in Canada, which was supported by quotas and price support, was relatively backward and lacked drive and innovation. A free market for the dairy industry would, I felt, lead to a reduction in cost of production of the milk. I was also very surprised in Colorado at the lack of any national plan on water resources. To me it seemed mad that whilst California was struggling for water, maize farmers in Colorado were flood-irrigating the crops and turning down government grants for pivot irrigation as they had all the water they wanted. In my opinion we would see a healthier farming industry in the UK, and greater agricultural output, if subsidies were removed.

When looking at how to feed the world we also need to look at what is going on off the farm as well. One third of all food in the world is wasted ⁽⁴⁾. That is 1.3 billion tonnes of food. This would be enough to feed 2 billion of the world's population.

The other key point is that although 795 million people in the world are chronically hungry (2016 *Estimation from the United Nations Food and Agriculture organisation*) 2.2 billion are overweight of which 750 million ⁽⁵⁾ are obese. These figures come from a recent "Global burden of disease study" overseen by the Institute for Health Metrics and Evaluation at the University of Washington.

2.3 Today's world

During my travels and since I began my Nuffield Farming journey in the autumn of 2015 there have been other significant developments in the world. I feel there seems to be growing tension in the world and a declining acceptance that people have of other people. People seem to be less willing to live in one big global community and less willing to work together. There is increasing demand for anti-immigration policies and sadly we have seen an increase in terrorism in the last couple of years in mainland Europe. On the political spectrum we have seen the Brexit vote on the 23rd June 2016 (whilst I was on my Global Focus Program) and we have seen the TV star property tycoon Donald Trump be elected to the most powerful office in the world. These two election results have been driven by both an anti-immigration rhetoric but also a feeling that the world is not fair and that a proportion of the population is being overlooked.

A study by the World Economic Forum report ⁽⁶⁾ found that half of the 103 countries it had data for saw "inclusive development index scores" decline over the past 5 years. The inclusive development index aims to capture social progress in a country, such as reduced poverty and reduced social



marginalisation as well as economic growth. The findings of this report add validity to the voices airing concern over economic growth not translating into social progress.

Is this correct? Well here are some interesting facts:

- In 2016 62 people in the world had as much wealth as the poorest 50% of the world's population
- In 2017 that number has dropped to 8 people having as much wealth as the poorest 50% of the world's population.

(The above data is from an Oxfam report dated January 2017) (7)

The graph below shows how wealth is distributed across the world's population. (8)

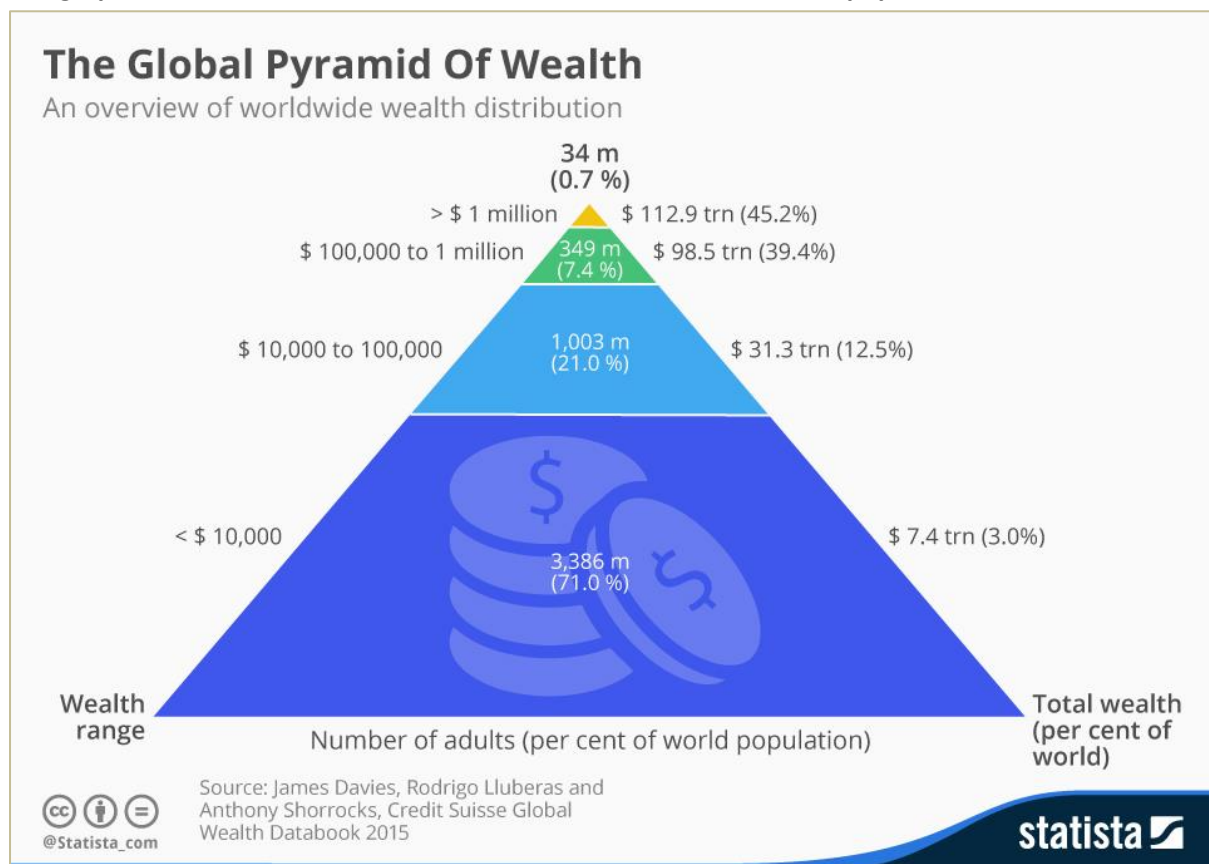


Figure 2: Graph to show how wealth is distributed across the world's population.
(Source: James Davies Rodrigo Lluberias and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2015)

On the next page a map(8) - Figure 3 - illustrates the income (GDP) per capita in 2015.

It shows that:

- In 2016 the richest country in the world, Qatar, had per capita wealth of \$127,660,
- In 2016 the poorest country in the world, Central African Republic, had per capita wealth of \$652.
- Per capita wealth is 196 times greater in the richest country in the world compared to the poorest

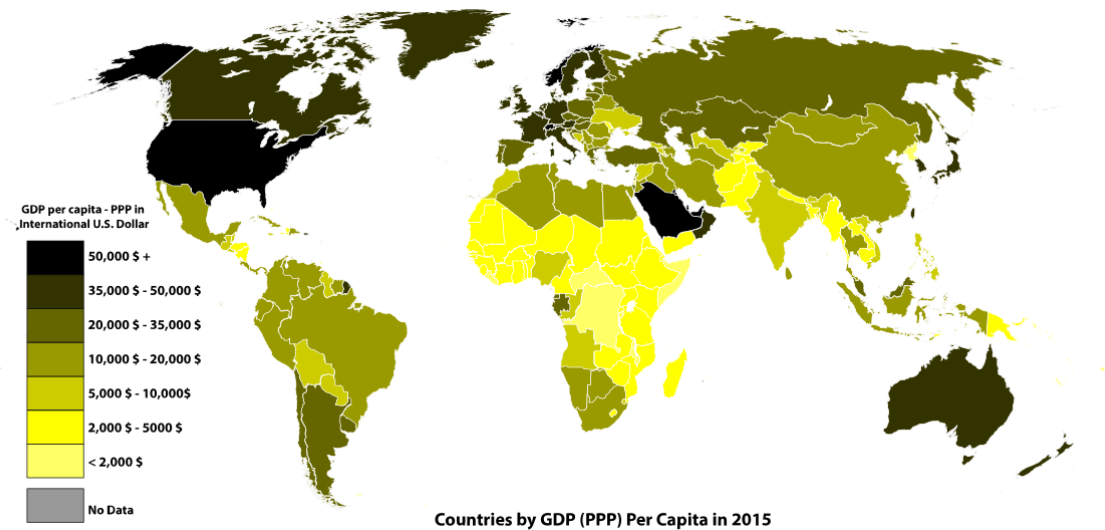
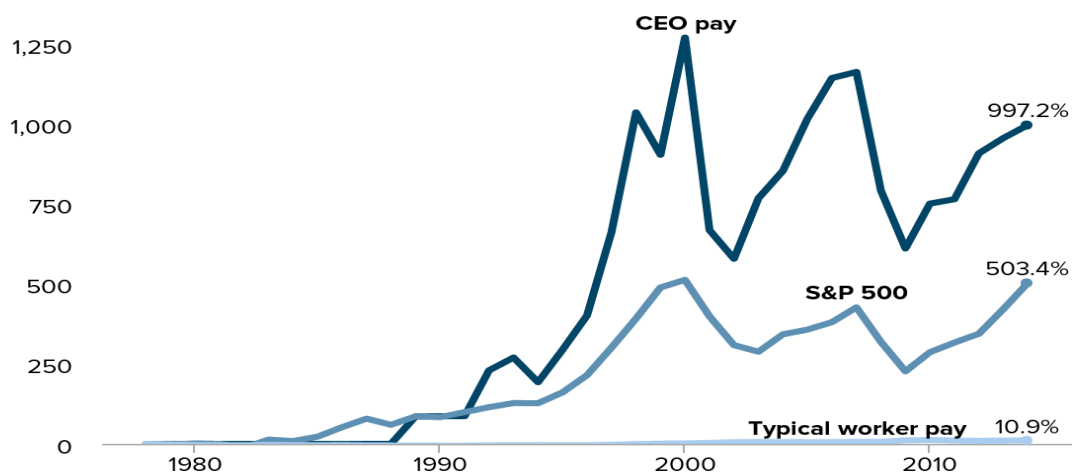


Figure 3: map to show income per capita in various countries of the world

- A 2015 Economic Policy Institute report showed that CEO pay had increased by 997 percent between 1978 and 2014 compared to the typical worker's wage increasing by 10% during the same period. See chart below.

CEO pay is up 997% since 1978

Percent change in CEO compensation, stock prices, and typical worker compensation, 1978-2014



Source: Economic Policy Institute analysis of data from Compustat's ExecuComp database, Federal Reserve Economic Data (FRED) from the Federal Reserve Bank of St. Louis, the Current Employment Statistics program, and the Bureau of Economic Analysis NIPA tables, as seen in *Top CEOs Make 300 Times More than Typical Workers*.

Economic Policy Institute

Figure 4: Chart to show that CEO pay had increased by 997% between 1978-2014, compared to typical worker's wage increasing 10% in same period.

Source: Economic Policy Institute



Now, I am very much a believer in capitalism, free trade and entrepreneurship. However it seems that capitalism in its current form is not delivering as it should do. Companies can be run with short term outlooks, and CEO s can be incentivised with bonuses based on share price and short term profit and not long term goals. A CEO is also charged with maximising the value of the entity which he runs, and as a result social impact on either employees or the community it operates in may well not be of high priority.

This model is in stark contrast to the great British entrepreneurs of the Victorian age who built huge businesses which have lasted right through to the modern day, and who not only provided well for the staff, but who also gave greatly to community projects and to the common good. Below are examples of three of those entrepreneurs and their achievements:

2.3.i. George Cadbury

George Cadbury was born in 1839 and entered his father's chocolate business in the 1850s. Along with fellow chocolatier Joseph Rowntree he propelled cocoa to replace ale as the standard breakfast drink among the lower and middle classes. With the help of Gladstone's reduction on the duty of imported cocoa beans, chocolate became available to the masses. Cadbury moved his factory to Bournville to provide more spacious and better working conditions. In 1895 he bought 120 acres of land on which to build a model village to ensure all his employees had good quality housing. George Cadbury also believed passionately in education and founded five colleges in Selly Oaks (Birmingham). After moving to nearby Northfield in 1894 he hosted daily tea parties for inner city kids, entertaining about 25000 children there every year.

2.3.ii Jesse Boot

Jesse Boot was born in 1850 and built a huge chain of retail chemists during his lifetime. Boot's success was based on buying medicines more cheaply by cutting out the wholesaler, and also by buying other products such as soaps in bulk and selling them in special promotional deals. Boot embraced advertising and then also went into the manufacture of his own medicines. By 1914 there were 560 branches of the chemist across the UK. Jesse Boot played a significant role "putting back" into the community. He built a park on the bank of the Trent, gave considerably to local hospitals and provided buildings and facilities to enable a university to be established in Nottingham.

2.3.iii William Hesketh Lever

William Hesketh Lever was born in 1851 and started out in his father's wholesale grocery business in Lancashire. Lever then went into business himself becoming a soap manufacturer. The firm which has developed from those humble beginnings is Unilever, the largest producer of consumer goods in the world today. After success with Sunlight soap he built a new factory called Port Sunlight on the river Mersey. Next to the factory Lever built a model village to provide a community where his workers could have a healthy, physical and social environment. William Lever, an advocate of a more equal distribution of wealth, was a pioneer with his adoption of profit sharing with his employees in 1909. On his death William left a proportion of his shares of Lever brothers in trust, the income from which was to be used for scholarships, education and research. That same trust is now responsible for £30 million of grants per year. When William Lever was asked by students of Liverpool university in 1922 what were the secrets of success in business he answered:



“The conduct of successful business merely consists of doing things in a very simple way, doing them very regularly, and never neglecting to do them.”

2.3.iv Bill Gates

There is a growing group of businesses that believes that business, as well as creating wealth, can and should also be a force for good in the world. Bill Gates has played a huge role in contributing to society. Bill Gates had donated \$28 billion to the Bill and Melinda Gates Foundation as of May 2013. The primary aims of the foundation are, globally, to enhance healthcare and reduce extreme poverty and, in America, to expand educational opportunities and access to information technology. One of the success stories of the Foundation has been the huge reduction in cases of polio around the world.

2.4 The ‘triple bottom line’

There is much talk of the “triple bottom line”. This takes into account both social and environmental impacts as well as financial ones when looking at the success of a company. The key here is that businesses truly adhere to these principles as opposed to paying lip service to them. Hopefully as the number of businesses that operate in this way grows in number, then like a snowball the momentum will increase and hopefully it will become the norm in business as opposed to being the exception.

The impact then across the world would be huge.

2.5 World hunger

One of the key impacts of poverty in the world is hunger. Economic poverty and food poverty are linked. Rent, taxes and debts are fixed costs for a household whereas food is a flexible item. 795 million people are chronically hungry ⁽⁹⁾ which means one in 9 people goes to bed hungry every night. 2.2 billion people are overweight ⁽¹⁰⁾. 98% of those people who suffer from hunger are from developing countries ⁽¹¹⁾. 9 million people in the world will die of hunger this year according to world hunger statistics and 3 million children under the age of 5 will die from malnutrition.

Malnutrition includes not getting the right vitamins and minerals to thrive, not necessarily being hungry. The following are impacts of malnutrition on children:

- Illness due to a weaker immune system
- Weak brain power due to inability to concentrate
- Obesity – a lot of lower-cost foods are nutritionally deficient, so although a child may not get enough of the right nutrients they may be getting too much of the wrong food, leading to a whole range of health issues

I strongly believe that it is our responsibility as farmers not only to feed the world but to feed the world in a responsible way.

2.6 UK distribution of wealth

The UK is typical of many of the world’s countries in terms of wealth inequality. The bottom 10% of the UK population have an income of less than £9,644 whereas the top 10% have an income of more than £83,875 ⁽¹²⁾.

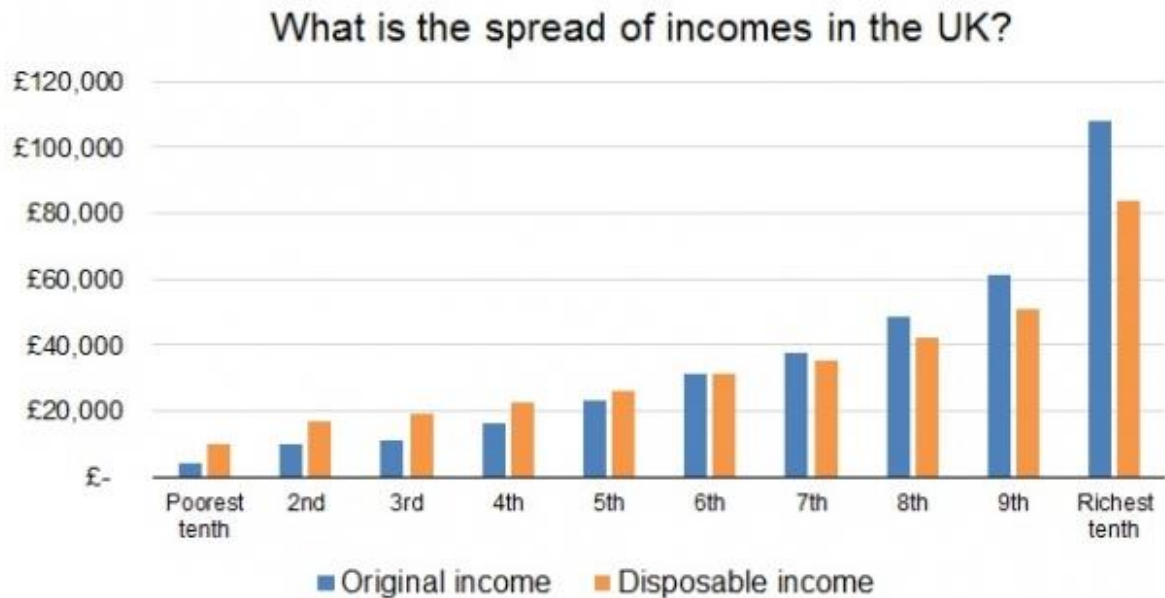


Figure 5: Graph to show spread of incomes in the UK.
Source: www.equalitytrust.org.uk/scale-economic-inequality-uk

As seen in Figure 6 below, despite a large reduction in inequality in the post war era, inequality has risen sharply again since 1979. This trend has flattened out since the 2008 financial crisis, but there is concern that the gap will begin to increase again as income for the poor stagnates, inflation starts to rise again, and austerity measures bite.

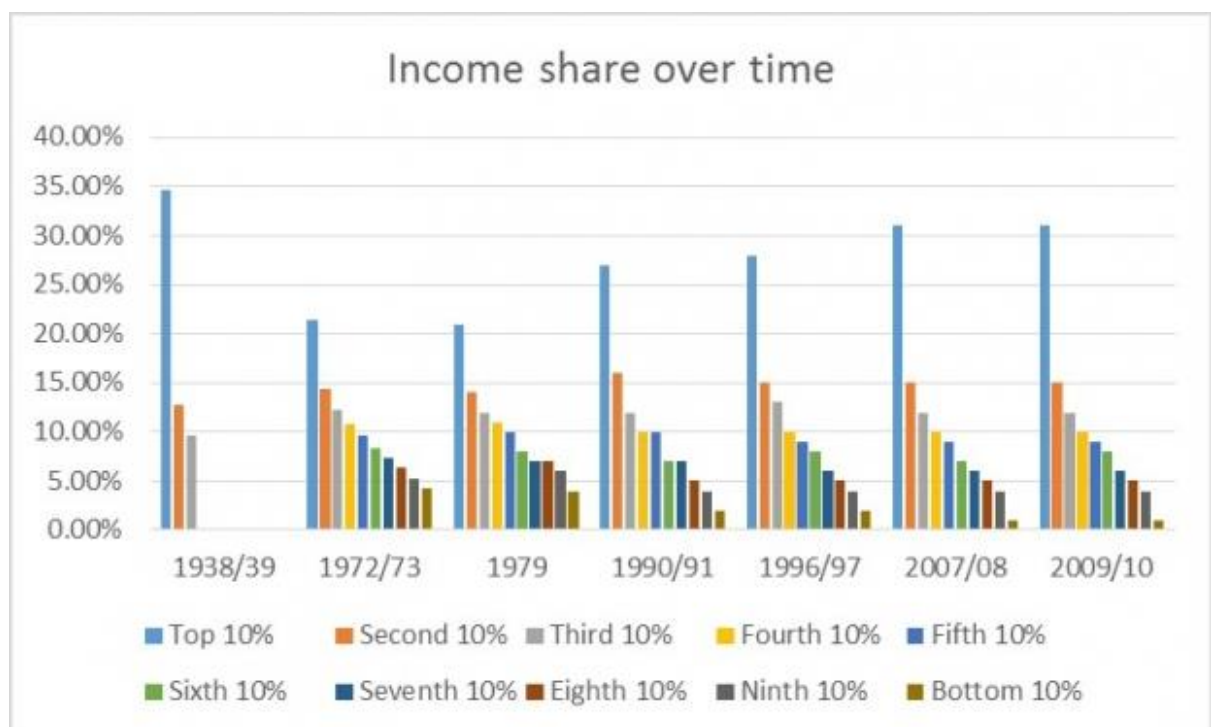


Figure 6: Graph to show income share of segments of the population over time.
Source: www.equalitytrust.org.uk/scale-economic-inequality-uk



2.7 Hunger in the UK

It would be easy to presume that hunger and malnutrition does not exist in the UK: but it does. The Trussel Trust, which is the largest food bank organisation in the UK, gave out 1,182,954 emergency 3-day food packs in 2016 (13). See diagram below.

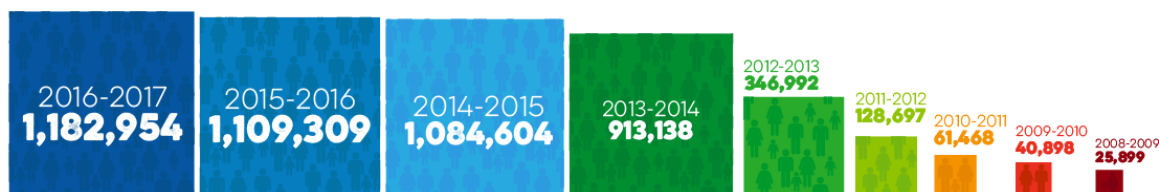


Figure 7: Chart to demonstrate number of 3-day food packs distributed by Trussel Trust in 2016.
Source: [//www.trusselltrust.org/](http://www.trusselltrust.org/)

Figure 8 below shows the reasons for people in the UK needing to use food banks .

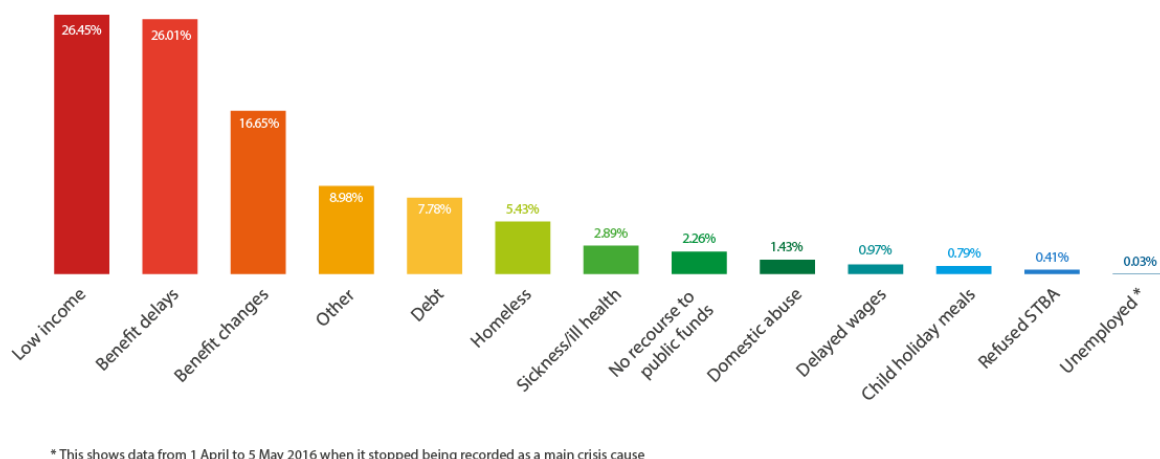


Figure 8: Chart to show reasons for people in UK needing to use food banks.
Source: [//www.trusselltrust.org/](http://www.trusselltrust.org/)

According to a report by the Food Foundation in 2014 (14) over 8 million people in the UK struggled to put food on the table and an all-party parliamentary group on hunger reported up to 3 million children are at risk of going hungry this summer (15). Hunger is only part of the problem as malnutrition also plays a hugely negative role.



2.7 What is food poverty?

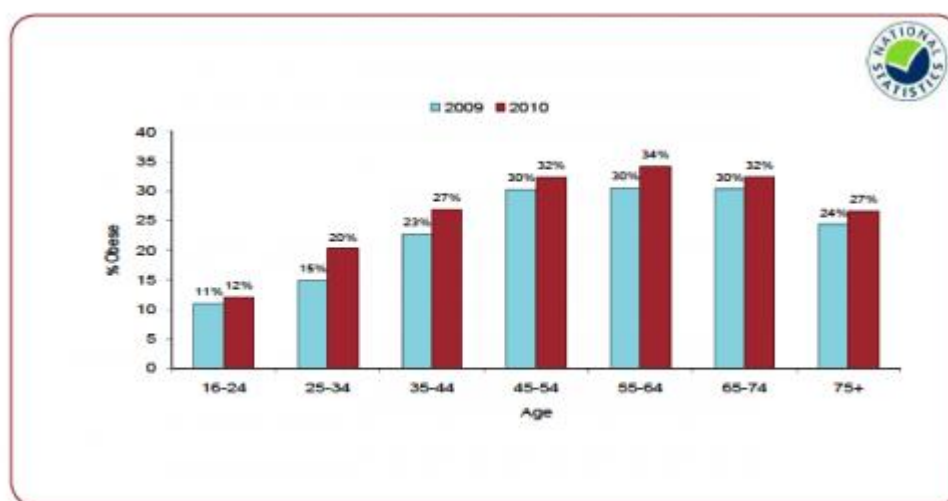
Food Ethics Council provides the following definition (16):

“Food poverty means that an individual or household isn’t able to obtain healthy, nutritious food, or can’t access the food they would like to eat. Despite increasing choice and affordability of food in the UK, many people eat what they can afford, not what they want.

This often results in people eating poor diets, which can lead to heart disease, obesity, diabetes and cancer, as well as inadequate levels of many vitamins and minerals. Obesity is now as much a sign of poverty in the rich countries, as hunger is in poor countries.

Poor children suffer from lower nutrient intake, bad dietary patterns, hunger, low fruit and vegetable consumption and problems accessing food in school holidays.”

In the UK 62% of adults are overweight and 24% of these are obese according to the NHS (17). One in three children in school year 6 are overweight or obese. The NHS spent 6.1 billion in 2014 on obesity-related illnesses (18) and obesity is estimated to have a 27 billion annual cost to the economy as a whole.



Source: Health Survey for England 2010 (NHS Information Centre).

Figure 9: Levels of obesity in England. Source: Health Survey for England 2010 (NHS Information Centre)

One of the driving factors of food poverty and obesity in the UK has been the rise in real food prices of products such as fruit, vegetables and meat. During the period 2007-2010 fruit and fresh meat purchased by low income groups has dropped by about 25%. During a similar period the price of fruit and meat has risen by circa 30%. This would suggest that some shoppers from lower income families see fruit, vegetables and meat as unessential items and that they have switched to food with more empty calories with associated problems of saturated fats and processed sugars.

From research and our own experiences in supplying fresh produce to schools one of the problems facing some families is their lack of accessibility to healthy food. Large supermarkets are often difficult



to get to, especially without a car but with young children in tow. Local grocery stores often offer little choice, especially of fresh produce, and prices are often at a premium. This can lead to poorer people having to pay higher prices for healthy food than do their wealthier counterparts. This has produced the concept of “food deserts”.

As a farmer in the UK, it is my belief that we, both as individuals and as an industry, need to play our part in feeding the UK population in a healthier way. There shouldn't be any greater champion of providing adequate food than the agricultural sector. In the UK there are issues with hunger and food waste, and I am keen to look at how we as farmers can promote fresh produce and healthy eating to families around the UK.

- This has led me to visit organisations in the USA and Brazil to try and learn from their experiences and knowledge in this area.
- I have also looked at the charities which are operating in the food poverty sector in the UK.
- At home we ourselves have set up a new charity called “Farm Fresh Revolution” (<http://www.farmfreshrevolution.com/>) whose aim is to promote fresh produce to families from poorer demographics.



3. My study tour: where I went and why I chose those countries

My Nuffield Farming travels included a Global Focus Program during June and July 2016. On my GFP I visited Singapore, the Phillipines, China, Canada and America. The itinerary for the GFP was set by Nuffield Australia.

On my personal study, which began when my study tour title was still *“Adding value and developing a pig business whilst contributing to society”*, I began by visiting Spain for a week commencing the 4th April. I felt Spain would be a good country to visit as it has the largest European pig industry and also adds a lot of value with some of its ham curing. I visited Denmark for a week commencing 18th April as it is largely considered to be at the forefront of productivity in European pig production and I visited the Netherlands in week commencing 23rd May as I was keen to specifically visit the Van Dree Group as an example of a large integrated meat business.

On changing my Nuffield Farming subject to *“What part one farmer can play in reducing food poverty in the UK”*, I visited Pennsylvania on 29th August 2016 for one week to look at how American food banks were structured. I went back to the USA on the 17th May 2017 for two weeks to visit Salt Lake City to see how the LDS church contributed to food security, and I looked at the Idaho food bank and the role Feeding America played. Whilst I was in the USA I also attended the Alltech One conference in Kentucky as I wanted to get some ideas around global agricultural issues and also whilst there spent time at God’s Pantry, a Kentucky-based food bank.

I visited Brazil on the 19th June for one week to learn about food challenges in that country and what was happening to deal with both hunger and malnutrition.

Country/Date	Duration	Reason for choice
Spain April 2016	1 week	Largest pig population in Europe and additionally adds a lot of value through ham curing
Denmark April 2016	1 week	At forefront of European pig production
Netherlands May 2016	1 week	To see Van Dree group, a large integrated meat business
Pennsylvania August 2016	1 week	To see how American food banks were structured
USA May 2017	2 weeks	To see how LDS (Latter-Day Saints) Mormon Church contributed to food security and the Feeding America program. Attended Alltech One Conference in Kentucky and visited God’s Pantry food bank
Brazil June 2017	1 week	To learn about their food challenges



4. Lessons from abroad

4.1 USA

During September 2016 I visited Pennsylvania in the USA to learn about how people in need of food are supported. The week was excellent and the two highlights were the **Central Pennsylvania food bank** which was headed up by Karen Woodings; and **Philabundance**, another food bank based in Philadelphia.

Government-funded help for the purchasing of food in the USA is delivered via the SNAP Program. SNAP stands for Supplemental Nutrition Assistance Program and is funded via the Department of Agriculture but delivered by the individual US states. Eligibility for the SNAP Program is calculated by a family's level of income compared to what is determined as poverty in the US. Poverty level varies depending on family size and to be eligible for the SNAP program families are permitted to have earnings of no more than 130% of the poverty level. Since the economic downturn in 2008 more people in the USA have been receiving support via the SNAP program. (20)

The table below highlights the 2016 federal poverty level in 2016 as determined by the US Department of Health and Human Services. The table shows that a two-person family is below the poverty line if they have less than \$16,020 family income a year.

<i>No. of persons in family</i>	<i>Family income per year</i>
1	\$11,880
2	\$16,020
3	\$20,160
4	\$24,300
5	\$28,440
6	\$32,580
7	\$36,730
8	\$40,890

Figure 10: Table to show income levels categorised as below the poverty line.
Source: <https://www.federalregister.gov/documents/2016/01/25/2016-01450/annual-update-of-the-hhs-poverty-guidelines>

4.2 Food banks and food pantries in the USA

In addition to the SNAP program there is also a very strong network of food banks across the USA, which further support those in need.

Food banks are distribution centres which supply food pantries. It is the food pantries that then give the food to members of the public. In the USA food pantries are run by volunteers and are often faith-based organisations. The food pantry has to sign a contract with the food bank that supplies it with food and is also visited and examined by the food bank. Food pantries are not allowed to sell food. A partner agency might typically be open 5 days a week, perhaps twice a day for 1.5 hours at a time.



They supply 60 families per day with a whole shopping cart of food, and the families are allowed to pick up the food once a month. Recipients of the food would be screened to see what their income is. Typically food pantries may also offer other support to members of the public such as financial planning, education and counselling.



Figure 11: The opening of a food pantry in Kentucky

Idaho food bank is typical of food banks in the USA. It covers the whole of Idaho and the 1 million people who live there. Idaho food bank supplies 250 food pantries - or partner agencies as they are called. 93 percent of the food at the food bank is donated and the food bank also facilitates mobile pantries. Food banks in the USA receive some funding from the government (circa 20%) but rely on donations to operate. A lot of funding comes from large corporate donations (circa 50%), something which seems to be very common in the USA.

Food comes into the food bank by a combination of food from the government, donations from retailers (almost-out-of-date food) and manufacturers (excess goods, mislabelled, out of spec), food purchased by the food bank, food direct from the farmer and food donated by members of the public. Retailers who donate food to the food banks are protected via the “Good Samaritans Act” which means they are not liable if someone gets ill through eating donated food. Farmers are encouraged to donate food to the food banks via tax incentives (*see Appendix 2*). More recently a Food Surplus Program has been set up. This is when the government buys produce off the farmer which otherwise there is no market for, either due to quality or excess production. This produce is then given to the food bank. This food surplus programme therefore reduces farm waste, supports local farmers and gets the food to people who need it the most. Typically the farmer would receive 50% of the normal market price for food supplied into the food surplus program.

One of the key issues for food banks is that they were traditionally limited to dry goods or packaged food. Many of the food pantries are not geared up to looking after and supplying refrigerated or frozen produce to members of the public who are therefore not keen on ordering too much fresh produce from their food bank. There is also the difficulty for the food bank linking up supply of fresh produce with demand especially with produce with limited shelf life.



Food banks try to deal with the “Hard Seven” in terms of fruit and vegetables. These include potatoes, sweet potatoes, onions, cabbage, carrots, apples and citrus fruits. With our own Farm Fresh Revolution charity we have tried to work with this same range of produce.



Figure 12: Inside God's Kitchen Food Bank in Kentucky

In Pennsylvania I visited both the Central Pennsylvania food bank and Philabundance. Both food banks wanted to increase the level of fresh produce to the people they supplied. The reason for this is that a lot of the food donated to the food banks may not be nutritionally high in value, and there is a desire from the food banks to give better quality food to the recipients in the form of fruit, vegetables and meat.

To achieve this they had each set up mobile pantries called “Fresh Express”. The food banks had identified key areas with the greatest levels of poverty and each week a delivery would be made to a central point in that area and members of the public could come to the lorry and pick up fresh produce. By identifying the poorest areas the food banks felt that they didn't need to screen the individuals for eligibility to collect food (although this is something that food pantries do) and the mobile food pantry would have the maximum impact. Also by controlling the deliveries themselves, stock control of the fresh produce was straightforward and the supply route to the end recipient shorter as the food pantry was being bypassed. It was this mobile food pantry model which has formed the basis of how my own Farm Fresh Revolution distributes its fresh produce.

Food banks in the USA also run backpack programmes. These are available for kids in school on the free lunch program. A bag of food containing 2000 calories and which can fit in the child's backpack is given to the child on a Friday and helps provide food for the child over the weekend. Typically it may include products such as a fruit cup and mac 'n' cheese ravioli. This program has been running for a good few years.



The Idaho food bank also runs mobile pantries and runs a backpack scheme. In addition to this they have also started a school pantry scheme, where parents can collect food directly from a school pantry. Mike Meyer who works for Feeding America for the Idaho area felt strongly that this was a better way forward than the backpack program.

Feeding America is a national not-for-profit organisation which coordinates the food banks across the country. Volunteering was a key area of considered value when looking at food banks. Service or volunteering is highly valued in the USA, and providing an opportunity for people to volunteer and help is seen as a big positive in itself. The volunteers I met, at both food banks and food pantries, were great, all giving their time freely and keen to contribute. It was inspiring to see so many people giving and making a difference in this way.

4.3 The Church of the Latter Day Saints and their approach to giving

I also spent time in the USA in Utah, the home of the Mormon Church. I found this very interesting. The Mormon Church was set up by Joseph Smith in the 1820s who believed he had seen another testament of the bible written on gold plates, and which confirmed that there had been a second coming of Jesus Christ in the Americas. Smith set the church up and moved west with his followers. Smith died in 1844 and Brigham Young then took the church to Utah and built Salt Lake City.

The church is now run by a modern-day prophet and his council of 12. Members of the church give 10% of their income to the church in the form of tithings. Members of the church can then also give additional money to be spent on causes such as hunger, missionary work or humanitarian aid. The reason for tithing could be debated but I do feel that without doubt the Mormon Church does do a lot of good. The church runs Bishop Storehouses all over the USA which provide food for those in need. A lot of the produce in these storehouses is produced on farms owned by the church, and some of it is processed in church-owned processing facilities. The church also provides lots of other services to those in need. This may be in the form of marriage counselling, financial help, addiction clinics, employment opportunities or providing charity and help to those suffering around the world.

4.4 Food Bank in Brasilia

I visited a food bank in Brasilia called Banco de Alimentos. It was similar to those in the USA but supplied food solely to organisations which would cook it on site. The staff at the food bank cited a lot of people being out of work and unequal distribution of wealth as being the main reasons for food poverty. At the time of my visit Brazil was under the cloud of a corruption scandal which the political system was deeply imbedded in. Despite the government being a socialist government in theory, there was evidence to suggest that power and money was controlled by a minority which looked to keep the masses in social immobility. I was told that 7 million people were hungry in Brazil but that there was more of an issue with overweight and obesity. The issue of too many people eating highly processed foods was again highlighted.

The food bank supplied 150 partner organisations, all of which typically picked up their supplies. Typically the partner organisations were places such as crèches for children or centres for vulnerable women.



Figure 13: With the team from Banco de Alimentos, a food bank in Brasilia

There were three ways that the food bank received its food:

1. The food bank had food bought for it by the government. The food was bought from small local producers in an attempt to support local farmers. The budget for this was given through the Department of Agriculture and this accounted for 80% of the food at the food bank.
2. Programme of zero waste – connect with farmers who bring produce to the market which is out of spec or hasn't been sold. This food gets donated.
3. Food drives

The food bank was distributing 26 tonnes of food per week and there were an estimated 27,000 people eating that food.

4.5 Cren

In Sao Paulo I visited Cren, a superb charity and one which was doing a huge amount of good in the local community. Cren was set up 17 years ago by a lady called Gisela and now it has two centres, one in a favela (slum area) and one in the CBD of Sao Paulo.

The centre had 4 main functions :

1. Creche/day hospital for children who had been identified as being at risk. 78 kids aged between 0-5 years of age used the facility. These children had been sent to Cren by the local



medical centres. The children would typically be malnourished or from an unsafe family environment.

2. Capacity building. The centre catered for various groups of 5-18 year old children. The children would attend Cren for the day and would take various lessons including, physical ed, nutrition, cooking, wellbeing, and on growing up. Likewise the centre ran two exercise sessions a week for local mothers. Although the focus was on exercise it really gave the mothers a chance to meet up and discuss other problems.
3. The centre was a medical centre carrying out medical assessments and orientations
4. The centre went out into the community and tried to influence and train those in positions of influence. A lot of this revolved around nutrition.



Figure 14: Pictured with members of the outreach team at Cren, with a local family, in their house in a Sao Paulo favela.

Cren could be summed up as a wellbeing centre trying to offer a complete programme. Meal nutrition is the tip of the iceberg but beneath is vulnerability, dangerous environments, domestic violence, drugs and a lack of education. By connecting with the family on issues about food, Cren could then begin to help them in other areas too.

My overriding thought regarding Cren was how it provided a safe environment and how the people who worked there acted as great role models, showing the children another way of life, which helped them to grow and develop their confidence.



Figure 15: Children at the day hospital at Cren

4.6 Other Brazilian social projects

Some of my time in Brazil was spent looking at non food-related projects.

I met Fernandinho who was an ex prisoner and had set up a charity making furniture out of waste building materials. The charity employed only prisoners and gave prisoners a stepping stone from imprisonment to getting a proper job. Time spent working also reduced the period of time imprisoned for.



Figure 16: Marlene, Nayara and me.



I met a lady of Italian descent called Marlene and her daughter Nayara who ran an organisation which employed women from the favelas (slums) to make clothes and bags often out of recycled material. The organisation allowed women (who often suffered from domestic violence) the opportunity not only to meet and talk, but also to earn money independently.

Another project was run by Katia, who was an amazing woman. She had been a professional ballet dancer, and had often supported herself by scholarships. She now runs a ballet school specifically for vulnerable children from the favelas. She raised money to collect the children by getting the parents to make flowers out of waste plastic and also by selling pizzas. There were 150 students at the ballet school, all of whom had to do well at school if they wanted to attend the ballet lessons, and all of whom got extra school lessons at the ballet school. Katia was a force to be reckoned with and, over 17 years, must have played a huge part in shaping many young girls' lives.



Figure 17: Katia at her dance school

The reason for telling you about these three people is because they highlighted to me how many people in the world wanted to contribute to their communities and were happy to spend their life doing it. These three people were all big characters with infectious personalities and the impact that they must have as role models on children and adults alike would have been huge.



5. Examples of food charities in the UK

5.1 Trussel Trust (22)

The Trussel Trust partners with over 400 local community groups to help alleviate hunger in the UK. Food is donated to the community group via local donations from individuals, businesses, schools and retailer collection points. Clients are directed to the foodbank by social workers, church pastors and probation officers and are given a voucher for 3 days' worth of emergency food. Community centre volunteers also help direct the client to other people who may be ready to help their individual situations. The Trussel Trust has a vision of there being food bank in every community. The focus of the Trussel Trust is not on trying to influence dietary habits but to provide emergency rations to people in great need.

5.2 Fare share (23)

Fare share was set up in 1994 by the charity for the homeless, Crisis. Sainsbury's were co-founders of the charity. The charity saves good food which is destined for waste for various reasons. Reasons may include packaging errors, short dated food, seasonal stock, retailer rejections, quality rejections, order reductions, wrong forecasting and damages. Fare share accepts donations into one of 20 UK distribution centres. Donations include meat, fish, dairy products fruit and vegetables as well as dry goods. Donations are sorted in the distribution centres and sent to 6,723 charities nationwide, all of which use the food on site to provide meals for people in need: 28.6 million meals. The focus of the charity is on reducing waste and providing meals for people in need.

5.3 Real Junk Food project

They describe themselves thus:

"We are a revolutionary concept designed to challenge and highlight the issues of food waste while creating inclusive environments where everyone is welcome. Consisting of cafés, outside catering, events, Sharehouses and Fuel For School, we use the Pay As You Feel Concept to utilise surplus food, educate the general public and campaign against global issues that food waste creates."

"We intercept surplus food from a wide range of places including supermarkets, restaurants, wholesalers, food banks, food photographers and using common sense and decades of experience make a judgment on whether the food is fit for human consumption."

5.4 Alexander Rose charity (25)

The Alexander Rose charity is focused on increasing the consumption of fruit and vegetables and decreasing the consumption of processed foods. The project is focused on parents with young children on low income. Parents are given Rose Vouchers (after eligibility has been established, based on assessments undertaken by children's centres) which can be redeemed at markets that sell fresh fruit and vegetables, and by doing so also supports local markets. The project is based in the London



Boroughs of Hackney and Greenwich and Lambeth. Evaluation to date has shown an increase in consumption of vegetables and fruit for those on the scheme. An increased number of meals cooked from scratch and a decrease number of ready meals purchased.

5.5 Feedbackglobal (26)

Set up by Tristram Stuart in 2009 the charity looks to raise awareness of issues around food waste. It aims *“to galvanise action, movement building, influence policy and supply chain investigations.”*



6. Farm Fresh Revolution

6.1 Farm Fresh Revolution

I have set up a charity with my wife Sally called Farm Fresh Revolution. We set the charity up in January 2017. The purpose of the charity is to promote fresh produce, meat and eggs, and to inspire people to include it in their diet every day. Sally and I have had a lot of help from Nuffield Farming Scholar Steve McKendrick in setting up of the charity, and also from Tamsyn Harrod from Boom Circle. We have also received lots of help from volunteers who pack the produce up and deliver it out to the schools. All this help has been very much appreciated and valued.

The inspiration behind setting up the charity has been the realisation of the issues around food poverty in the UK, the desire to contribute as a business to society, and trying to maximise our impact to society by working within a sphere I feel I can add value to.

Food issues in the UK could broadly be split into three areas which are:

- food waste
- food hunger
- food nutrition.

There are a number of charities in the UK at the moment operating in the food sector and doing a tremendous job. The majority of these are focused on either food waste or emergency hunger relief and therefore I feel it is appropriate for me to focus on food nutrition. Data shows that in poorer income households diets are on average not as good and this is impacting on people's health and in turn on their life expectancy; and on the economic burden of the country. Diets in poorer households have been affected by the rising cost of fresh produce, causing people to eat less fresh produce, and because it is cheaper to buy more processed foods. This results in lower intake of vitamins, minerals and fibre and an increased intake in saturated fats and salts. Fresh produce is also often inaccessible and/or expensive in local convenience stores and the processed food industry has the advantage of huge marketing campaigns which wrongfully promote unhealthy food to people. As farmers I feel we have a responsibility and a duty not only to feed the nation but to do so in a meaningful, healthy and responsible way.

As farmers I feel we have a responsibility and a duty not only to feed the nation but to do so in a meaningful, healthy and responsible way.

At home the drive behind the structure of Farm Fresh Revolution was that as outdoor pig farmers we rent land off a number of vegetable farmers and are aware of vegetables being underutilised and not entering the human food chain for various reasons - whether it be due to specification or over supply. I felt we could work with these vegetable farmers to create another supply chain utilising some of their grade two vegetables. As free range chicken farmers and pig farmers we have access to good quality chicken leg meat and pork shoulder meat which is good value for money as it is underutilised in the UK supply chain. With friends in the egg industry we were aware of out-of-spec free range eggs which could provide better value for money. Within our current business structure we also distribute



free range pork and poultry to butchers around the UK. As a result of this we have refrigerated cold stores and vans that we use to store the products and make the deliveries. Due to butchers not wanting to take delivery of meat on a Friday (they want to prep the meat earlier on in the week ready to sell over the weekend) we have access to the infrastructure needed to deliver our fresh produce on Fridays.

On my travels I have been inspired by the American food bank system, and their desire to supply more fruit and vegetables to people. Their method of doing this has been to set up mobile pantries and to deliver to certain areas on set days of the week, as well as supplying food to existing (static) food pantries. The mobile pantry allows them to get produce in and deliver it straight out without the concern of managing shelf life whilst waiting for orders from (static) food pantries. The mobile pantries also cut out the need for the food pantries to have an infrastructure of fridges etc to manage the produce. The other point I liked about mobile pantries is that by picking an area with high levels of poverty and population they felt it was not necessary to screen clients and determine their level of income before giving them food.

I feel the very basic act of giving, looking for nothing in return, and treating those recipients as equal is a very worthwhile act in itself.

On my travels I saw numerous examples of people being very generous with their time and resources and the impact this had on other people. I feel the very basic act of giving, looking for nothing in return, and treating those recipients as equal is a very worthwhile act in itself. People need to know that they are valued and respected.

In practice Farm Fresh Revolution has identified 6 schools which have a high percentage of pupils from schools with a family income of less than £12,000 which entitles the schools to Pupil Premium Grants. The reason we have decided to use primary schools as the medium to distribute fresh produce is



Figure 18: Food stall set up at Nathaniels Primary School in Stoke on Trent



because they are the centres of communities with large numbers of people going to the same spot at the same time: and also because the dietary habits that are established at a young age will persist into adulthood.

We visit each school every fortnight with three schools one week and three the next. We arrive at the school on a Friday at school pick-up time. We set up a market stand and parents from the school are able to come and collect the food.

the dietary habits that are established at a young age will persist into adulthood.

6.2 Farm Fresh Revolution costs

Cost of food given to parents at primary schools in Staffordshire vs the cost of buying the food in a local retailer is shown in this table.

Product	Quantity	Cost to us	Cost at local Retailer
Free range sausages	8	110p	300p
Diced Free range chicken	420g	126p	379p
Free range eggs	6	45p	139p
Potatoes	2kg	65p	149p
Carrots	600g	21p	55p
Onions	500g	11p	85p
Iceberg lettuce	1	30p	59p
Spring onions	1 bunch	20p	49p
Pepper	1	30p	40p
Garlic	1	20p	33p
Apples	4	60p	165p
Tangerines	3	30p	77p
Bananas	4	50p	135p
Packaging		10p	
Total		628 pence	1665 pence

Typically we would give out 45 bags at each school.

45 bags x 3 schools = 135 bags of produce

Additional costs for delivering 45 bags to three schools are explained in Table 3 below.

Additional costs	
Fuel for 3 vans to deliver	£30.00
Fuel to pick up the produce	£25.00
Administration costs such as picking up produce	£100.00
Total additional costs	£155.00
Total cost per recipient family	£1.15
Total cost of our bag	£1.15 + £6.28 = £7.43



Total additional costs are £155 or £1.15 per bag making the cost of our bag to delivery circa £7.43 vs £16.65 from our local retailer. This hopefully shows that we are delivering a high “bang for buck” for the financial input we are paying into the project.

6.3 Volunteers

On the delivery day - Friday - we have a rota of volunteers from the local community who help to pack the vans up and drive to the schools and give out the food. These volunteers have been a great help and we would not have been able to deliver this service without them.

6.4 How has it gone?

The project has been very frustrating at times. Initially our plan was to sell the bags of food for £6 and to have the bags packed up and ready to go. Initially there was a large level of interest and participation, however this did drop off. The other issue we struggled with was making sure we took the right amount of produce with us ensuring we could cater for everyone but didn't bring any back. This is helped by having the teachers as a buffer. Teachers are always keen for the produce but understand that the parents come first. It is good for the parents to see the teachers participating in the project. If we do have any produce left then it is taken to a local community fridge.

Subsequently and after my most recent trip to America we decided to lay the produce out on a market-style stall and offer the parents a selection, meaning that if there is something they don't want they don't have to take it. We also decided to give the produce away for free. This has been largely to do with the opinions of the many people I have met in the food charity sector who have all said that is the best way to get food to people; and also due to an interesting experiment which was carried out by Dan Ariely. Dan summarises the experiment in a column he wrote in the Guardian (27).

the many people I have met in the food charity sector ... have all said that (giving it away free) is the best way to get food to people

“In one experiment, Kristina Shampanier (a PhD student at MIT), Nina Mazar (a professor at the University of Toronto), and I went into the chocolate business. Well, sort of. We set up a table at a large public building and offered two kinds of chocolates - Lindt truffles and Hershey's Kisses. There was a large sign above our table that read, "One chocolate per customer." Once the potential customers stepped closer, they could see the two types of chocolate and their prices.

So what happened when the "customers" flocked to our table? When we set the price of a Lindt truffle at 15 cents and a Kiss at one cent, we were not surprised to find that our customers acted with a good deal of rationality: they compared the price and quality of the Kiss with the price and quality of the truffle, and then made their choice. About 73 percent of them chose the truffle and 27 percent chose a Kiss.



Now we decided to see how “free!” might change the situation. So we offered the Lindt truffle for 14 cents and the Kisses free. Would there be a difference? Should there be? After all, we had merely lowered the price of both kinds of chocolate by one cent. But what a difference “free!” made. The humble Hershey's Kiss became a big favourite. Some 69 percent of our customers (up from 27 percent before) chose the “free!” Kiss, giving up the opportunity to get the Lindt truffle for a very good price. Meanwhile, the Lindt truffle took a tumble; customers choosing it decreased from 73 to 31 percent.”

The topic of giving away the produce for free has been much discussed between ourselves. People may say that the model is not sustainable if we are giving the food away. Virtually all the social projects I have seen on my travels do cost, whether it be in time or finance and, although initially wanting the food project to be self-funding, I do not now think this is possible.

We have also decided that as promoting fresh produce is at the core of what we are trying to do we need to ensure the quality of what we give out is excellent. As a result we are not using second grade fruit or vegetables which we initially thought we would.

*although initially
wanting the food
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think this is possible.*

We have made a big effort whilst delivering the fresh produce not to come across as a charity giving away food but rather as farmers trying to promote fresh produce. I feel this is very important and in the same spirit the parents need to be respected by offering them good quality produce. In fact the chicken, pork and eggs are all free range.

People may also argue that providing people with something for free is not actually helping them and in fact what they need is the tools to help themselves. With regard to this point we are not forcing anything on anyone. People are free to help themselves to the produce regardless of their economic situation but likewise they are under no obligation to do so. From personal experience of spending times at the schools giving away the produce, it is very much appreciated and valued by the parents and at no point have I felt that it isn't. In fact I would say that the produce has been valued even more since it has been given away. We allow any parents at the school to collect the produce and there is no means testing. When we first started the project one school, Two Gates in Tamworth, invited certain parents to collect the produce and did not open it up to all the parents. This fundamentally didn't work.

*Having the market stall
set out as opposed to
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the parents*

We currently supply the schools on a fortnightly basis and we have discussed at length (especially in the light of giving the produce away for free) whether we should deliver to schools once a month but to twice the number of schools. We have concluded at present that to keep the parent engagement levels high we should continue with fortnightly. This may be revisited in the future.

Since we have given the produce away for free and offered a buffet style option the project has again become a lot more popular and we have been getting great feedback from both teachers and parents. Having the market stall set out as opposed to



simply giving the parents the bag has also led to far greater interaction with the parents as we are able to chat to them as they fill their bags up. This is great as we see a by-product of the project being greater engagement between farmers and members of the public. In fact the baseline studies (see Appendix 3) showed that over half the parents wanted more interaction with farmers.

studies showed that over half the parents wanted more interaction with farmers.

We are keen to also try and educate the parents further about fresh food and how to use it. At each delivery we give out leaflets with new recipe suggestions, which are provided by The Children's Food Trust and their programme "Let's get cooking" (see Appendix 4). As well as recipe cards we also give out newsletters to the parents (see Appendix 5).

One of my hopes for the charity is that it will give me a validated voice in the food debate and that we may well be able to build on it, allowing a greater number of people to benefit from it.



7. Conclusions

1. Within the world there are huge disparities between those countries with money and those without; and also between the people within those countries. In recent years there has been a growing movement against immigration and a more vocal rejection of other cultures. This has resulted in more polarised political parties and more inwardly-looking governments. It is my strong belief that for a fairer and more peaceful world there should be a greater movement of people, race, culture and wealth throughout the world.
2. Capitalism has exaggerated inequalities in some countries and I feel that independently owned businesses need to take a lead role in running their businesses for social benefit as well as wealth creation.
3. Inequality also leads to poverty, and poverty leads to food poverty in both developing and developed countries. The agriculture industry in the UK is dominated by family-owned businesses, both large and small, all of which have the power to make a positive difference to society.
4. Being involved in food production I feel that we have a duty to ensure that people in the UK all have enough food and the right food. This could be one way which agriculture could contribute to food poverty issues and play its role towards a fairer society.



8. Recommendations

1. Farm Fresh Revolution to continue but aim to increase the number of participating schools to 10 within the next 12 months
2. Farm Fresh Revolution to collect data over the coming 12 months on the impact the project is having
3. Farm Fresh Revolution to provide a template and guidance to other farmers of whatever size, who may want to form a relationship, and promote fresh produce, to their local school. This relationship could be, for example, a farmer going into his local primary school once a term with both his own produce and that donated by other local growers and butcher shops.
4. A steering group to be set up by one of the leading farming organisations in the UK, such as LEAF, to further discuss and investigate ways that the farming industry can play its part in tackling food waste, hunger and nutrition. The steering group to include farmers as well as health experts, educators and people involved in the food poverty sector.
5. The farming industry to identify someone who can lobby and try to influence government on food poverty-related issues, on behalf of the agricultural industry.
6. Tax incentives to encourage farmer donations into food charities to be explored.
7. An annual Fresh Produce day to be launched by the farming industry where farmers can go into schools, connect with the public and give out produce. This will help bridge the gap between farmers and the public and create a talking point via which PR can be created around healthy eating and the importance of fresh produce.



9. After my study tour

My Nuffield Farming Scholarship has given me time and perspective to decide how I want to spend my time going forward, and the proportion of time and energy I want to put into building up our core farming business and trying to deliver social and community benefit.

My conclusion is that I do want to keep driving my business forward as only by trying to move forward with it will I keep motivated by it and keep trying to improve it. A key motivation for me, though, is that I can channel a proportion of the earnings from my business into worthwhile charities and social projects.

I am very keen for my business to be highly efficient and profitable but also to be socially responsible and to contribute positively to society.

As a result of my study we will be looking to continue with Farm Fresh Revolution, look to build on it, and look to evaluate it in more detail.

We will continue with the education project we run from the family farm.

We will set up a charitable foundation into which a fixed percentage of business profits will go each year to benefit the wider community.

I will seek to meet up with UK food distribution charities to learn more about solutions for the UK.

I will endeavour to spend a proportion of my time championing food security issues and trying to contribute towards more people having better balanced diets and less people going hungry.

Rob Mercer



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Sally Thompson from Nuffield Brazil for organising such an interesting trip to Brazil



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Appendix 1

FarmLink Summer Newsletter 2017



2016/2017 has been a very busy year for myself and Roy on the FarmLink Education Project here at Packington Free Range. Since September 2016 we have hosted 90 tours and including our talks within schools and visits to the farm we have seen just over 3880 children!



We offer a variety of activities for the children to do whilst they are on the farm with us; our activities include meeting our pigs and sheep, although nearly all the children confuse our Jacob sheep Daphne (as pictured on the left) with a goat!

We are also lucky enough to have the use of our ancient woodlands situated behind the farm. Therefore

we include activities such as den building, making mini shelters for small woodland animals, giant nest building, weaving spider's webs amongst the trees and taking the children on a range of woodland trails/walks.



Usually, our afternoons are taken up by either raft building, woodland mobile making, pond dipping or frog hunting. They also get the opportunity to look at model farm machinery and crops. With the older children, we also look at our two lagoons where we explain how we irrigate crops and also what wildlife inhabit them.



Next year, Roy and myself look forward to welcoming more children to the farm and lots more of the same activities and fun!! 😊



Appendix 2



2016 Changes to Food Donation Tax Incentives

The PATH ACT, passed by Congress December 18, 2015 includes several improvements to the tax incentives allowable for food donation:

1. **Making the extension to non C corporations permanent** & allowing non C Corporations to carry forward the deduction for 5 years (same as c corporations);
2. **Allowing** farmers and other "cash method" accounting taxpayers to consider 25% of the fair market value of the donated food as the cost to produce the food;
3. **Increasing** the 10% cap of allowable charitable contributions to 15% for donated food;
4. **Codifying** an important Tax Court ruling, *Lucky Stores, Inc. v. Commissioner of Internal Revenue*.

Tax Law prior to 2016: Permanence for C corporations only

- Enhanced tax deduction available for donations of fit and wholesome food inventory to qualified 501(c)3 nonprofit organizations serving the poor and needy (Internal Revenue Code 170e3)
- Qualified business taxpayers were able to deduct cost to produce the food and half the difference between the cost and full fair market value of food donated
- Non-C Corporations were allowed enhanced benefits on a temporary basis, subject to Congressional renewal every 2 years which had last expired December 2014.

What does this mean for donation partners?

- As of 2016, deductions now apply to C corporations and non C corporations permanently. Any donations made in 2015 by non C corporations are also eligible for the enhanced tax deduction.
 - This will greatly increase the ability of small and mid-size businesses to donate food (including farmers, retailers, restaurants and food manufacturers).
- NEW in 2016: Donors that use cash basis accounting can estimate their cost to produce the food and take the enhanced tax deduction.
 - This is particularly beneficial to farmers.
- NEW in 2016: Donors who are at the 10% cap on charitable contributions can now enjoy tax benefits for donated food up to 15% of their adjusted gross income.
 - This will be particularly beneficial to companies with low profitability.
- NEW in 2016: Donors have greater certainty in how they value the food donated on an on-going basis.

This last provision, the codification of the *Lucky Stores Inc. v. Commission of Internal Revenue*, is one of the most significant parts of the tax law for farmers, retailers and food service operators as well as manufacturing donors. The impact of the language differs by sector but it opens more opportunities for all.

The language from the Joint Committee on Taxation Technical Explanation states:

"Third, in the case of any contribution of apparently wholesome food which cannot or will not be sold solely by reason of internal standards of the taxpayer, lack of market, or similar circumstances, or by reason of being produced by the taxpayer exclusively for the purposes of transferring the food to an organization described in section 501(c)(3), the fair market value of such contribution shall be determined (1) without regard to such internal standards, such lack of market or similar circumstances, or such exclusive purpose, and (2) by taking into account the price at which the same or substantially the same food items (as to both type and quality) are sold by the taxpayer at the time of the contributions (or, if not so sold at such time, in the recent past)."



Appendix 2 continued

- A protocol for establishing a Fair Market Value (FMV) for products that are not sold in market. FMV is key to the calculation necessary to calculate tax benefits based on IRS tax code (see below).
- That donations that cannot or will not be sold because the product is out of specification or overproduced, can be valued at the same price as other similar food items sold by the taxpayer at the time of the contributions (or in the recent past).
- A specific protocol for valuing product in circumstances, where FMV is not currently easily valued so companies are able to benefit from the enhanced tax deduction, potentially offsetting incremental costs to donate:
 - Products produced directly for donation, perhaps to utilize excess ingredients or line time
 - Products that are off spec and currently landfilled or sold for animal feed vs donation
 - Bulk product currently going to animal feed or left in field may be packaged in consumer-friendly packs
 - Relabeled product with missing allergens on the label currently going to landfill

How does this impact donations?

Farmers

- Provides a protocol not previously available which establishes a Fair Market Value (FMV) of product donated from the farm or packing sheds by utilizing the selling price of goods moved to market
- Expands applicability of the tax benefits to all farmers and producers and by making it permanent allows farmers to incorporate donation as a regular part of their crop planning, either grown to donate or as an outlet for unmarketable product.

Manufacturers

- Previous legislation placed the burden of establishing the FMV for a donated product on the producer based on a selling price to a customer
- In the case of off spec product or a variation in packaging, size, or formulation variation an established selling price (FMV) wasn't available, negating the producer's ability to calculate enhanced tax benefits
- New law allows for a similar or past item to be used in establishing a FMV for manufacturers
- By establishing a protocol for enhanced tax benefits, this provision now compensates the company in a small way if there needs to be an investment in packaging or labeling to insure the product is able to be distributed

Retailers/Food Service outlets

- It expands the Lucky Store case nationally and establishes that no matter what the age of the product being donated, that the FMV is the same as the original selling pricing of fresh product
- Permanence of this provision allows grocery and food service retailers to invest in permanent donation processes with long term commitments and impact, assured of on-going tax benefits, again partially offsetting any investment required

Sample Enhanced Benefit Calculation:

The sum of one-half of the unrealized appreciation (fair market value minus cost of goods sold = appreciation) plus the taxpayer's cost, but not in excess of twice the cost of the contributed property.

Example:

Selling Price (FMV)	\$3.00
Cost of Goods Sold	\$1.00
Gross Profit	\$2.00

Previous tax benefit for non C corporations:	\$1.00 (COGS) = business loss x applicable tax rate
New tax benefit for C and non C Corps	\$1.00 + .50 = \$1.50 (1/2 the difference between FMV and COGS)
	NOTE: The maximum deduction can never exceed 2 x COGS

For more information on the legislation, please contact Carrie Calvert at ccalvert@feedingamerica.org. Disclaimer: This information does not constitute tax advice. Please contact your tax advisor to confirm eligibility for federal food donation tax incentives as specified by Internal



Appendix 3

Overall Summary of Baseline Questionnaires (6 schools)

Total number of Surveys completed

Not all questions were answered by all respondents

Enter total
142

What is your relationship to the child?	Total	% of Sample
Mother	115	81%
Father	14	10%
Carer	2	1%
Other	11	8%
Do you live in the same household as the child?	Total	% of Sample
Yes	137	96%
No	5	4%

Who is the main meal provider in your household?	Total	% of Sample
Mother	110	78%
Father	20	14%
Carer	2	1%
Other	9	7%

Respondents 141

What is the average annual income of your household?	Total	% of Sample
Less than £15,000	59	44%
£15,000 to £24,000	44	33%
£25,000 to £49,999	26	19%
£50,000 to £74,999	5	4%
£75,000 or more	0	0%

Respondents 134

Where do you buy most of your food?	Total	% of Sample
Supermarket	140	99%
Corner Shop	10	7%
Local grocer or butcher	24	17%
Other (please specify)	4	3%

Could give more than one response



Supermarket Summary	Total	% of sample
Lidl	4	3%
Aldi	42	32%
Sainsburys	1	1%
Tesco	43	33%
Morrisons	8	6%
ASDA	26	20%
Waitrose	0	0%
Marks & Spencer	0	0%
Iceland	6	5%

Respondents 130

Roughly, how much money does your household spend a week on buying food?	Total	% of Sample
Less than £30	1	1%
£30-50	30	21%
£50-80	66	46%
£80-110	10	7%
£110-150	29	21%
More than £150	5	4%

Respondents 141

Do you buy fresh meat, fruit and veg?	Total	% of Sample
Yes	138	99%
No	1	1%

Respondents 139

	It's expensive		It's affordable		I don't pay attention to the price		I have no opinion on the price	
Perceptions on PRICE	Total	% of sample	Total	% of sample	Total	% of sample	Total	% of sample
Fresh Veg	18	13%	105	75%	12	8%	5	4%
Fresh Fruit	30	22%	92	66%	12	8%	5	4%
Fresh Meat	72	51%	54	39%	9	6%	5	4%

	Fruit		Vegetables		Meat	
Food Items included EVERYDAY of those people who buy fresh food	Total	Rank most common	Total	Rank most common	Total	Rank most common
Breakfast	98	2	9	4	15	3
Lunch	71	3	78	2	80	2
Supper	27	4	100	1	101	1
Snacks	118	1	32	3	8	4



Do any members of your family miss out meals?	Total	% of Sample
Yes	46	54%
No	40	46%

Respondents 86

Thinking about healthy food, which statements describes you the most?	Total	% of Sample
I understand the health benefits of all food groups	83	58%
I would like to know more about healthy food	23	16%
I understand the basics of healthy food	48	34%
I understand a small amount	6	4%
I'm not sure what healthy food is	0	0%
I don't think healthy food is important	0	0%
None of the statements apply to me	0	0%

Is there anything that stops you from eating more fresh food at the moment?	Total	Rank: "1" Being Most Common
I'm not sure what is healthy	7	8
I don't enjoy "healthy" food	2	9
My family and/or friends don't like healthy food	2	9
My children don't like healthy food	11	7
Fresh food is too expensive	35	2
It is difficult to find places to buy fresh food	14	6
It is difficult to get to places to buy fresh food (eg transport)	15	5
I don't have the equipment or utensils to prepare and cook healthy food	1	12
It's too difficult to prepare and cook healthy food	2	9
I don't know how to use the equipment and utensils required to prepare and cook healthy food	0	15
It takes too much time to prepare and cook healthy food	21	3
I don't like cooking	1	12
I don't know how to cook	1	12
Other	19	4
None selected	41	1

Would you like to know more about farms in your area?	Total	% of Sample
Yes	77	93%
No	6	7%

Respondents = 83



How important is the role of local farms in the community?	Total	% of Sample
Extremely important	76	54%
Important	48	34%
They do more harm than good	0	0%
Not important	3	2%
I don't know	14	10%

Respondents 141



Appendix 4



Sausage and Bean Hot Pot

This easy recipe is really hearty and great for winter. Cooked in one pot to save on washing up, this is an economical dish to serve to family and friends. This Hot Pot can be served on its own with crusty bread, but it can also be served with mashed potato and a green vegetable to make a more filling meal.



Soya, sulphites and wheat (gluten)*

Nutritional information per portion (300g):

Energy	Fat	Carbohydrate	Fibre	Salt
1300kJ 312kcal 14%	11g 18%	3.1g 15%	8.6g 33%	1.7g 28%

*of an adult's reference intake.
Typical values per 100g: energy 300kJ/70kcal.

Equipment

Scissors
Plate
Can opener
Sieve or colander
Sharp knife
Chopping board
Frying pan or large saucepan with lid
Measuring spoons
Wooden spoon
Casserole dish
Measuring jug
Pan stand
Oven gloves
Tasting spoon

Ingredients

Serves 4
8 thick reduced-fat pork sausages (approximately 450g)
400g can butter beans
1 red pepper
1 medium onion
1 x 15ml spoon vegetable oil
¼ x 5ml spoon chilli flakes
1 x 5ml spoon fresh OR ¼ x 5ml spoon dried rosemary (optional)
400g can chopped tomatoes
2 x 15ml spoons tomato puree
125ml water
Ground black pepper (optional)

*Presence of allergens can vary by brand - always check product labels. If you serve food outside the home you must make allergen information available when asked.



Top Tip

- Any good-quality sausages can be used. Lincolnshire, Cumberland and vegetarian sausages all work really well.



Appendix 5

www.farmfreshrevolution.com



**Farm Fresh
Revolution**

Farm gate to School gate!

JUNE 2017

OUR BAGS ARE

FREE

FOR A TRIAL PERIOD UNTIL SUMMER HOLIDAYS!

You can also just pick what you want from fruit, veg, meat and eggs.

Why are we doing it? We want to **inspire** your children to enjoy eating **fresh food** direct from **farmers!** It's **healthy**, and if you cook a meal from scratch it's also **cheaper** than pre-packed food, and **much tastier!** Get the kids involved and they will love the food more. We want to see if more people want fresh food if it's free.

Donations to the project are welcome on collection but only if you want to.

FEEDBACK PLEASE! We are keen to know what you think. Please email me at sallymercerc@mercercfarming.com or private message me on

Storing Vegetables

Vegetables: Put them in the fridge as soon as you get home. If veggies get warm they can go mushy or discoloured. Make sure the bag you store the veggies in has some holes punctured to allow for good air flow. Pack vegetables loosely in the refrigerator. The closer they are, the quicker they will rot.

Potatoes – these can be stored in a dark kitchen drawer where it's not too warm. If they get warm they can start to sprout.

Onions – at this time of year onions are getting ready to sprout! To make yours last longer keep them in the fridge or a dark cupboard or drawer.

**Stoke deliveries
every other Friday
2.50-3.30pm**

16 June
30 June
14 July

**Don't' forget our
Recipe Competition!**

Win a free bag for a term
(ask school office for
details)

To avoid WASTE, please let
school office know if you
CAN'T COLLECT
food one week

Check out recipes at

Let's get cooking
AT HOME



**Farm Fresh Revolution
c/o Packington Pork
DE13 8AJ
info@
farmfreshrevolution.com**