



Nuffield Farming Scholarships Trust

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The Value of Food

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Disclaimer

The views expressed in this report are entirely my own and do not necessarily represent the views of the Nuffield Farming Scholarship Trust, or my sponsors or any other sponsoring body.

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1. EXECUTIVE SUMMARY

This study looks into the real value of food, beyond just its monetary value. My understanding of food production and its value to the small and medium sized producer led me on a journey to determine its value to consumers and the wider community.

I met artisan producers whose produce is famous worldwide, attracting thousands of tourists to their areas each year. I also explored communities that were built on local food production and urban areas that were being revitalised through farmers' markets.

On my travels I noticed that locally produced high-quality food and drink created enjoyment, improved health and brought people together, strengthening relationships between families and communities. Local food production also created jobs and inspiration, particularly when it was part of educational facilities such as the Stone Barn Centre.

My findings conclude that, with the unstable economic climate and increasing fuel prices, local rather than international food production seems more sustainable and now is the time to implement change.

Meeting local producers and visiting local agricultural organisations, I learnt of the great impact local food production and educational facilities had on the local community.

However, to meet the demands of today's society and to reduce some of the issues facing society, change needs to happen from the top, with a change in food policy.

2. INTRODUCTION

My background

Farming and love of the land is deeply rooted in both my family and me with many previous generations having been farmers. In the 1970s my father, Ronald Dart, began to sell his produce direct to customers on his farm just outside Topsham, on the Exe Estuary in Devon. Ronald was one of the first farmers to offer pick-your-own. As the shop became more established he began to stock other local produce and built strong relationships with local producers, many of which still last today. This was the start of our family business, Darts Farm.

In 1982 my father died aged 49. My brothers, Paul and James, and I, took over the management of the farm and developed the retail side, growing Darts Farm into a lifestyle shopping destination but with local food and produce from our own working farm at its heart.

Darts Farm as a business has been my passion. This passion is something that has grown as a result of my farming background and my understanding of the importance of local food production without which community consumer support businesses become unviable and local economies go into decline.



Me with my four children

Furthermore, being a proud father to my four children, George, Maddy, Josie and Kitty, I want to help ensure that the beautiful landscape, vibrant farming community and wonderful local produce we now enjoy continues to exist for my children and *their* children to enjoy.

Study overview

Supermarkets and large international chains are dominating the food market, causing independent shops to struggle. This, combined with the current global financial crisis impacting on international trade, makes it questionable whether a globalised approach is sustainable and whether it allows local economies to thrive or even exist.

I believe there is a place for international trade, industrialisation and standardisation in providing cheaper, more accessible food and to generate enough food for a growing population, though this needs to be balanced in such a way that local food production and local economies can survive and thrive.

If paying an extra 50p for a product means a local farmer can continue to run his business and employ people and the product would not have to be sourced abroad, increasing our carbon footprint, would you do it?

Unregulated capitalism has led to mass cheap food production, with a belief that access to cheap food, rather than locally sourced quality food, would improve standards of living. However, I have seen the detrimental impacts this policy has had on local producers and local economies.

In my study I therefore wanted to explore some of the key issues faced by local and urban communities today and discover whether the value of food can go beyond its monetary value to providing employment, skills development, education, enjoyment, family and community cohesion and improving health.

I believe these benefits can come from having a closer connection with food and the land, taking lessons from our ancestors, the hunter gatherers, who worked together to feed the community and who lived a sustainable lifestyle, with little wastage.

3. GLOBALISATION, INDUSTRIALISATION AND STANDARDISATION

Darts Farm is very much a niche operator in a UK food market dominated by large supermarkets, international chains and fast food restaurants. With globalisation and industrialisation this trend is repeated worldwide. The focus has become one of efficiency, intensification and standardisation, driven by a cheap food policy.

Giant supermarkets dominating the UK food market, dictating price, and increasing global costs, fuel and utility prices have led to 3,000 small and medium sized farms in Britain going into poverty or out of business over the past decade (*The Guardian 2011*). This in turn has led to unemployment, loss of farming skills and a change in the landscape. The increase in fast food outlets has also led to standardisation of breeds, resulting in a reduction of breed varieties.



South Devon cow

Devon's economy relies heavily on agriculture and tourism (*Devonomics 2010*), with the beautiful rural landscape and range of high quality local artisan produce attracting both domestic and international tourists. Therefore, the loss of farmers and culture through globalisation, industrialisation and standardisation, and in turn the loss of local produce and changes to the landscape, could also have a negative impact on tourism, greatly affecting Devon's local economy. Nationwide, the decline in traditional rural industries has had an effect on rural poverty, with one in five people living below the poverty line (*Stuart Burgess, the Government's Rural Advocate, cited in Sky News 2010*).

The arguments for and against globalisation are widely known and debated. My experiences of the UK food industry indicate it is the large international corporates, such as supermarkets and fast food chains, that benefit from globalisation. For small to medium sized producers and retailers it is unsustainable, with increased competition and a reliance on international markets, which in the current economic climate is unpredictable.

The wider international picture of globalisation is also bleak. Globalisation has been driven by cheap fuel prices, but in recent years the price of fuel has increased dramatically, pushing international food prices to their highest level in 30 years in 2008. Combined with the economic downturn, this has forced millions more people

into poverty and hunger' (*Food and Agriculture Organization of United Nations 2011*).

Localisation seems to be a move toward self-sufficiency, with the creation of local valuable jobs, the development and retention of skills and trades, and the availability of locally sourced food that does not need to be transported, thus reducing our carbon footprint. Producing food locally also provides opportunity for education and for protecting local rare breed varieties.

Localisation means we produce what we need, which would reduce world wastage. Globalisation has led to the world producing and wasting more food than ever before, with approximately one third of all food produced for human consumption going to waste (*United Nations Food Agency 2011*).

4. TODAY'S SOCIETY

Inspired by the Occupy Wall Street movement in New York, other Occupy demonstrations are taking place around the world - in 951 cities in 82 countries - "to initiate global change" in protest against capitalism and greed (*The Guardian 2011 and OccupyWallStreet.org 2011*). These demonstrations, the strikes in Greece and the recent riots across London and other cities in England, highlight social unrest with the imbalances in society, as well as the issues of unemployment, family breakdown and broken communities, or as David Cameron suggests "a moral collapse" (*cited in BBC News 2011*).

2011 has seen the highest unemployment level in 17 years, especially amongst young people and it is expected to get worse (*Office for National Statistics 2011*). The TUC has identified that standards of living are dropping for 'middle Britain families', with wages not keeping up with inflation, tax and benefit changes and cuts in public services (*TUC 2011*). The UK is now the 'fattest country in Europe' with obesity and type 2 diabetes on the rise (*Diabetes.co.uk 2011*). This is expected to cost the NHS £6.3 billion by 2015 (*Telegraph 2011*).

With a growing population our demands on resources are increasing. We therefore need to search for more sustainable solutions, such as renewable technologies. This also relates to food, with some scientists arguing there will be food shortages (BBC 2009). Recent figures also indicate the number of undernourished people is on the increase. Some American inner cities have been experiencing food deserts where low-income people have poor access to fresh vegetables and fruit and other whole-foods. This in turn has led to poor health.

Spend Shift

Gerzema and D'Antonio (2010), in their book 'Spend Shift', explore how the 2008 financial crisis and subsequent period of economic instability has led to a return to more traditional values. They suggest people faced with the possibility of banks, institutions and governments collapsing, have begun to reflect on where we are as a society and what is important.

We have been living through a period of excess credit, where society has demanded more. However, this has proven to be unsustainable and a period of austerity is now leading to a period of lower economic growth and reduced disposable incomes.

This in turn has led to an increase in hobbies, such as bread-making, grow your own and other "do it yourself" experiences, which not only save money, but provide enjoyment, satisfaction, togetherness, sharing and other fulfilling emotions.

5. THE STUDY

I focused my travels on developed areas of the world with strong food communities, ranging from prosperous regions in Italy to poverty stricken inner cities of America. I met producers and influential people who have driven forward a localised approach to food production and consumption, exploring the ways it impacted on local communities.

5a. Italy

My first visit was to the Italian region of Tuscany; an area known for its stunning landscape, rich culture and history, and high quality artisan produce. Previous visits to Tuscany, in which I had the opportunity to meet artisan producers, enjoy wonderful local produce and learn of the skills and knowledge involved in production, initially inspired my study into the value of food and therefore I decided to start my journey here.



Some of Tuscany's food production

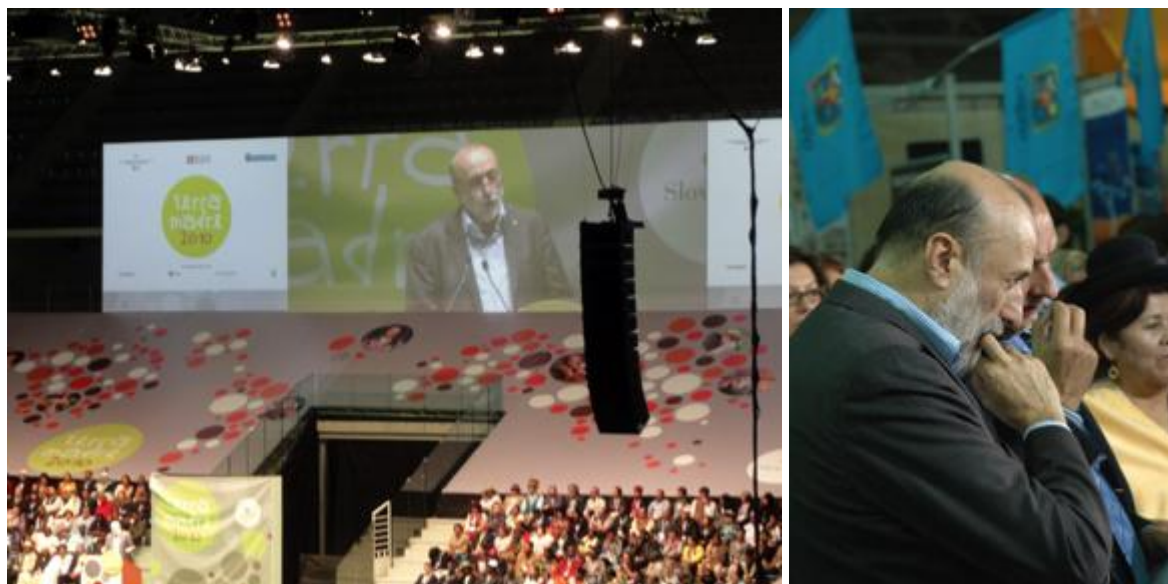
5a (i) Slow Food

When I arrived in Tuscany I visited the biannual global get-together of Slow Food International, a member's organisation started by Carlo Petrini in 1986 as a reaction to the ever increasing dominance of fast-food. Petrini believes fast-food and the industrial food production process are destroying cultures and ways of life.

Slow Food has three guiding principles. Food should be:

1. Good – food should taste good and be enjoyable.

2. Clean – food should be clean to the environment, with no over-use of pesticides, fertilisers, hormones or any other additives.
3. Fair – the consumer should pay a fair price for his product making it worthwhile for the producer.



Bi-annual get-together of Slow Food International

Slow Food refers to consumers as co-producers - in buying the product consumers are helping to support the producer. Knowledge is at the heart of this co-production. With greater understanding of a product and its production process, the consumer recognises the value of the food he eats, thereby making more informed choices.

Slow Food runs projects all over the world, working with producers to help protect and preserve the future of products it believes are at risk of extinction, giving products 'Ark of Taste' status.

Slow Food believes food is not just a function but that it is at the heart of the family and community and that the enjoyment of food builds relationships in families and communities. It also believes in quality, which creates more pleasure and leads to a reduction in waste. With the world wasting a third of all food produced, it is arguable that we should focus more on quality and less on price if we aim to feed the world's growing population.

The Slow Food movement is rapidly growing and the internet is linking people from all over the world who have similar beliefs and passions; local food, global movement.

see next page for 5a (ii) Agri-Tourismo

5a (ii) Agri-Turismo

Italians value their locally sourced produce highly. They have world famous wines and olive oil and small scale farms used to be in abundance. However, from the 1950s these small scale farms became less profitable so many farmers went to the larger towns in search of work.

To preserve the rural culture, farming communities and local produce, and to make use of abandoned buildings, small farmers in rural areas of Tuscany, Piedmont and other rural areas of Italy decided to open up their homes and farms to visitors, increasing their revenue stream. This is known as Agri-Tourismo. Tourism is vital to the region's economy and, through Agri-Tourismo, domestic and international tourism has grown, with many tourists visiting rural areas of Tuscany to view the stunning landscape shaped by vineyards and olive groves, to meet the producers and to try the local produce. Agri-Tourismo is now so popular that it has revitalised rural communities and has ensured the protection of local produce.

I believe this is a great display of how high quality small-scale local food production can sustain a rural economy; though it is not just the produce that attracts people, but the landscape in which the produce is grown. Therefore it needs protecting.

5a (iii) Indigenous foods

Whilst in Italy I also visited the city of Alba in Piedmont, another area celebrated for its fine foods and rich culture. Part of this culture are the indigenous piedmont peppers and white truffles, also known as 'Alba Madonna'. People travel thousands of miles to try these indigenous specialities, creating tourism income for the local economy and protecting the existence of these indigenous varieties.



Piedmont peppers and white truffles in a market in Alba, Piedmont

As these examples from Piedmont and Tuscany have shown; high quality small producers can play an important role in the local economy, not just in terms of food sales, but also tourism, with areas becoming famous for their indigenous produce.

However, it is not just small producers that protect and promote indigenous varieties. Piedmont is also highly known for its hazelnuts and Ferrero, a company based in Alba that has been described as 'one of the most reputable in the world' (*Forbes* 2009), with 21,500 employees and that generated approx. €6.3 billion in revenue between 2008 and 2009, uses these locally grown hazelnuts in their world famous, internationally distributed products, including Nutella and Ferrero Rochers.



Hazelnuts in a market in Alba, Piedmont

5a (iv) Celebrating the harvest

The harvest festival, an event that indicated the end of a successful crop growing season, was once celebrated widely by farming communities in the UK, with farmers inviting all those who helped grow and cut the crop to a feast. This festival is now generally only celebrated by churches, in which the focus is often to provide for people less fortunate than ourselves. However, in farming communities in Italy, it is still widely celebrated.

I met Mario and Luisa Fontana, wine producers at Cascina Fontana in the wine hills of Barolo, near Alba. They invited me to their very special supper, in which they celebrate the completion of the wine harvest with a local delicacy bagna cauda and the new Dolcetto. Friends and family are brought together through this celebration and get the opportunity to enjoy wonderful produce and each other's company. This was a great example of food and drink bringing people together, providing an opportunity to build friendships and relationships.

Mario and Luisa invite friends and family to this meal every year as it is an important part of their culture and provides a time to enjoy and relax with friends and family after a tough season. In the past it was also used in the UK to bring communities together in a time of celebration. Last year Darts Farm helped organise the 'Nello's Longest Table' in Topsham, Devon, in which the community came together to have a meal and celebrate local produce. Everyone brought their own food and paid a small price for a seat at the table. People got the opportunity to get to know their neighbours and there was a fantastic feeling of community spirit. It was so

successful that it has now become a biennial event, suggesting these community celebrations have a place in today's society.



'Nello's Longest Table' at Topsham, Devon, last year

5b. U.S.A.

I have been lucky enough to experience some of the luxurious produce from around the world, staying in beautiful locations, such as the rural areas of Tuscany and Piedmont. These experiences, however, come with a high cost, making it only accessible to a minority of the population. Good quality food should be accessible to all and production should impact positively on all communities. Therefore, my next trip was to the town of Hardwick in Vermont, USA.

5b (i) The town that food saved

In his book, 'The Town that Food Saved', Ben Hewitt describes how the community of Hardwick, a small town of 32,000 people in Vermont, found vitality in local food. Hardwick was once a prosperous community based around its rich resources of natural granite. At one point there were more pubs per capita of the population than anywhere else in America. After the great depression of the 1920s and a period of stagnation, as well as the discovery of reinforced concrete, the demand for granite for construction diminished and, as a result, Hardwick's economy went into decline. Until recently it had the lowest average incomes in America with extensive poverty yet, due to its remote rural location, limited opportunity to take advantage of the large corporate expansion that was spreading throughout the rest of the United States.

Hardwick has recently become a thriving community again, but this time based on food and its rural hinterland. A combination of successful agri-preneurs, rural people starting up their own businesses, and voluntary organisations have combined to help create this vibrant food community. A vast array of high quality artisan businesses has set up in the area, including Hill Farmstead Brewery; Sugar Shack, which creates maple syrup; and Jasper Hill.

see next page for 5b (ii) Cellars at Jasper Hill

5b (ii) Cellars at Jasper Hill

One of the leading agri-preneur businesses I visited in Hardwick was that of Matteo Kehler and his brother Andy at Jasper Hill, now one of America's most acclaimed cheese-makers. From 40 Ayrshire Cows Matteo and Andy have built a multi-million dollar business.



Matteo Kehler

On the back of their own success Matteo and Andy have now begun to market and mature cheese for other cheese makers in Vermont, such as the mass producer, Cabot. Lacking in the expertise to produce high-end cheese, Cabot invested in small artisan cheese makers, Matteo and Andy, to acquire the skills to build cellars in which to mature the cheese.

As a result of Jasper Hill's success, Matteo and Andy are bringing high quality jobs to the area and have helped associate Vermont with quality food production.

5b (iii) Ben and Jerry's

I met many small Artisan producers in Vermont who had helped the local economy and got the area known for its wonderful produce. I also came across Ben and Jerry's; which started as a small ice cream parlour in a renovated gas station in Burlington, Vermont. It has grown into a world-famous international organisation and was sold to Unilever in 2000. Although it is now a large corporate, it keeps its values at the heart of everything it does, focusing on children, families, the environment and sustainable agriculture.



Ben and Jerry's

Ben and Jerry's social mission describes how they must play a responsible role in the local, national and international environment. For example, they continually endeavour to find more environmental friendly alternatives to packaging and waste, they support family and rural farms, and they invest in local community initiatives.

5c Community initiatives in USA

On my travels I found many community initiatives in which whole communities worked together to support and sustain local food production. These initiatives often involved farmers, families, gardeners and chefs. Projects I came across focused on education, fundraising, retail and community farming.

5c (i) Centre for Agricultural Economy

Matteo has been instrumental not only in driving his own business, but in the setting up of the Centre for Agricultural Economy (CAE), which is a not-for-profit organisation, funded by donations from charitable foundations such as the High Meadows Fund and Waterwheel Foundation. The CAE objectives are to help start up and support food businesses. It has initiatives such as the 'Food Access and Security' program that helps raise awareness on hunger in Vermont by providing support and raising money for organisations.



The Agricultural Centre by the Centre for Agricultural Economy

Its most recent major project has been the Food Venture Centre, an incubator facility for start-up bakery, meat, cheese and fresh produce businesses. Often, in their early days, start-up businesses cannot afford the capital costs of overheads. Thus, this facility is aimed at helping these businesses through this very difficult stage.

The Centre for Agricultural Economy is also about educating the local community. In 2007 the CAE

purchased Atkins Field, a former Woodbury Granite Company consisting of 15.2 acres and 3 granite era buildings to build an agricultural centre that...

'...encourages and inspires community members to engage in the local food system as well as to increase agricultural capacity in the immediate area, with the result being a strengthening of [their] community, local economy and food security'.

The Centre for an Agricultural Economy (2011)

The CAE also has community allotments and community gardens, that are looked after by gardeners and families in the community, and that can be enjoyed by everyone, with picnic tables, tools, areas of shelter and paths. This land is owned and maintained by the Town.

5c (ii) Community stores

On my travels around Vermont I came across co-operative stores and family owned country stores which were community hubs, such as 'The Willey's Store', which sold everything from guns to freshly prepared meals, clothes and local produce. These fascinating independent stores thrive in rural areas of America, often having been in existence for over 100 years and served sprawling communities.



Willey's Store in Vermont

5c (iii) Community restaurants

Launched in 2008, Claire's Restaurant focusses on supporting the local Hardwick community, using local, sustainable produce and other local services, such as launderettes and professional services. The menu focusses on farm to plate using fresh seasonal produce, meaning the menu changes every day.

Claire's Restaurant has got a reputation for its high quality food and drink at affordable prices. This reputation spreads far beyond Hardwick, with people travelling long distances to visit it.



Claire's Restaurant

5c (iv) Community Supported Agriculture

Community Supported Agriculture (CSA) is a social model that connects people to food, the land and producers. It is an economic model allowing consumers to buy their produce directly from a local family run farm that is known by the community. Farms that operate under CSA conduct good environmental practices and allow people to access good quality, seasonal, healthy food. CSA also educates people in local food production.

Pete Green is another agri-preneur from Hardwick. Pete farms and grows vegetables, salads and fruit, though he needed a guaranteed income in order to

invest in his farming business. Therefore, Pete worked with the local community to start a supported box-scheme, in which over 400 people guaranteed to buy a box of fruit and vegetables from him, paying in advance on a quarterly basis. This has allowed Pete to develop a more sustainable approach to cash flow in his business and secures the future of his farm. In return, fresh, nutritious local vegetables are provided to the community, with the community receiving a 15 to 20% discount. Meat, bread and dairy produce, from other local producers, has now been added to the box scheme, thereby securing sustainable farming, food production and improving the local economy in Hardwick.

Pete's business has become iconic with huge community support. Sadly Pete's root store recently burned down, though the local community pulled together to raise \$60,000 to help him re-build it.

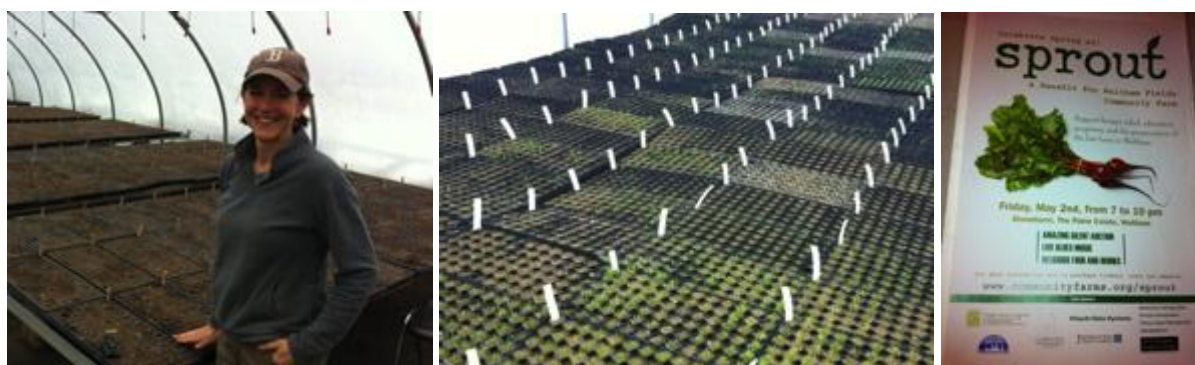
5c (v) High Mowing Organic Seeds

Tom Stearns, founder of High Mowing Organic Seeds, began seed production by digging up his backyard and converting his garden shed into a seed packing area. His seeds sold so well locally, that he realised that what was once a hobby was turning into a viable business. Tom expanded seed production by renting land and then contracting local farms to grow seed. It is now a thriving concern.

Tom strongly believes in supporting sustainable agriculture. Each year Tom donates thousands of pounds worth of organic produce to Salvation Farms that provide quality food to Vermonters in need. He also donates seeds to schools and community groups, as well as delivering workshops at his farm, helping to educate local people on food production and enabling them to grow their own produce.

5c (vi) Community farms

At Waltham Fields Community Farm in Massachusetts people of all ages from the local community volunteer their time to work on the farm, growing vegetables for consumption by the local community. Its aim is to 'promote local agriculture and food access through [their] farming operations and educational programmes, using practices that are socially, ecologically and economically sustainable' (*Waltham Community Farms 2010*).



Waltham Fields Community Farm

Through their hundreds of shareholders who each pay an annual fee of \$500 to get 5 months of high-quality vegetables and herbs from the farm, the thriving enterprise generates money for local hunger relief organisations.

5d. Educational facilities in USA

Community initiatives display how groups of people can create and support sustainable agriculture and food production. For people to be able to support these initiatives, they need to have an understanding and appreciation of food production.

A reduction in government funding has seen the closure of agricultural departments, colleges and research institutes across the UK due to the high costs involved with training people in agriculture (*Pardey, Beintema and Wood 2006*). However, areas in America, in both rural and more urban locations, are investing more in agricultural education facilities which drives more sustainable, localised farming practices and influences people to become agri-preneurs.

5d (i) The Stone Barn Centre

I visited the Stone Barn Centre for Food and Agriculture, which is based in Westchester County, New York, just 25 miles north of Manhattan. It is a non-profit farm and educational centre with a restaurant set up by the Rockefeller family, which was opened in 2004 as a memorial for Peggy Rockefeller.



The Stone Barn Centre, 25 miles north of Manhattan

It is a working farm that has initiatives to create a healthy and sustainable food system. There are public awareness programmes to improve the way America eats, children's educational programmes and 'Growing Farmers' initiatives in which young people are given hands-on experience with apprenticeships and training. Being located so close to New York City people from urban and suburban areas are able to experience a working farm.

5e. Inner city farmers' markets in USA

Many of the developments in localised, more sustainable farming that I explored came either from producers or private investors and were generally funded by charitable foundations. All these organisations and businesses have made great impacts on their local area, though to have a wider impact on all communities, whether rich, poor, urban or rural, I believe food policy needs to change, with the

focus moving from globalisation and industrialisation to local food production. One example of how a change in food policy has been implemented is in Inner City Farmers' Markets in America.

Some inner city centres in the USA, including Los Angeles, are experiencing food deserts. To overcome this problem, Michel Nischan, Founder of Wholesome Wave Foundation, started up farmers' markets in deprived areas of inner cities. Through a government scheme based around food stamps for people on benefits, he managed to get the private sector to double the value of the food stamp provided it was spent on local food in a farmers market.

As well as having the opportunity to buy fresh produce, recipients are given recipe cards and have monthly visits from a food doctor, with the aim of measuring the reduction in obesity and diabetes. In addition to the health benefits, the farmers' markets have become community hubs with social benefits that had not been anticipated. This scheme is now being rolled out across America and has inspired other charitable organisations to set up similar schemes.

6. CONCLUSIONS

Around the developed world there are people with the same beliefs as I find in my own local community: people who appreciate the value locally produced food has in the community; improving health, creating jobs, bringing people together, enjoyment, education and enhancing the local economy.

In a rural community, such as displayed in Hardwick, Vermont, it is often small producers and individual agripreneurs who are trying to build a vibrant local food community. Hardwick has benefited greatly from these individuals, with the area becoming known for its world-class food production. However, Hardwick is in the minority and my Nuffield experience has led me to believe that to have a wider impact on communities all over the developed world, policy has to change with governments providing support for local food production.

For centuries land surrounding homes has been used for small, local food production. However, in recent years policy in the UK and worldwide has focused on globalisation, with a few large international organisations dominating the market and dictating price. Lack of demand and a very competitive marketplace has led to a reduction of small local producers, and as a result, a lack of jobs, loss of skills and rural poverty.

The current financial crisis and resultant 'credit crunch' could have a potentially disastrous effect on the global food chain, with food security becoming a major issue. International food systems of importation and exportation are becoming less sustainable, with the increase in fuel prices and tax increases. As Senator Edward Avalos, the Under Secretary of State for Agriculture in the US, believes, to revitalise and sustain our communities, food policy needs to move away from focusing on the international food chain and mass produced goods, to concentrate on providing support for local farms and producers; protecting the environment, jobs and skills; and making local food more accessible.

This current economic climate has brought about a change in values, with people looking for money saving alternatives such as growing their own fruit and vegetables and home cooking. Also, as Gerzema and D'Antonio discovered, people are reevaluating where we are as a society, looking for activities that provide a feeling of togetherness and sharing. It is clear for so many reasons that now is the time for the government to consider and implement change.

7. RECOMMENDATIONS

Investment in Agriculture

Devon is the most popular retirement County in the UK (*The Guardian 2009*) as well as being a favourite holiday destination for both international and domestic tourists. Due to its beautiful scenery, wonderful food and vibrant rural communities, people enjoy visiting and living in Devon. To ensure people continue to view Devon as a desirable place to live in or visit the government needs to sustain these vibrant rural communities.

By investing in local agriculture, local farmers and producers will have the financial support to continue their production, protecting the local economy and jobs. Schemes such as the Centre for Agricultural Economy and Community Supported Agriculture have proved to be sustainable in Vermont, allowing for greater local food production and skills to be developed.

Sustained local food production will increase the number of butchers, bakers, farm shops, delis etc. in local towns, which should, in turn, help the current situation of dying high streets.

Access to Fresh Local Food

For those who have lower incomes or who are on benefits, buying locally produced food and drink may not be a feasible option, as it is often seen as being more expensive than buying cheap, mass-produced alternatives. There has been a dramatic rise in obesity in the UK, particularly among poorer communities, highlighting the need for cheaper and more accessible healthy food.

By providing food stamps for people on benefits to spend on local fresh produce and regular food doctor visits, Michel Nischan's inner city farmers' markets in the US have seen improved health amongst the recipients and the forming of social benefits such as community hubs. By implementing this across the UK, people on benefits would be able to afford to eat healthily, the government would spend less on medical care for obesity and other diet related health issues, and local producers would be in greater demand.

Development Policies

With local farmers struggling to survive in the current economy and local councils being pressured to provide more and more housing, alluvial farmland is being irreversibly lost to housing developments, which is dramatically changing the

landscape. Housing policies should become more focused on ensuring fertile land is protected against development, and build houses on less valuable land.

One example where this has already been implemented is the US Farmland Protection Policy Act 1981, which provides a list of rules and regulations to protect farmland. As well as these rules and regulations, the government also purchases farmland to lease out to farmers, reducing the risk of farms being sold for non-agricultural use.

To allow communities the opportunity to grow their own produce, development policies could dictate that new housing schemes should dedicate a certain percentage of green space for community allotments and orchards. The government could also provide financial support and education for local communities to start up community farms and community-supported agriculture. As well as making fresh seasonal produce more accessible, this would additionally educate families in local food production and provide family enjoyment and community cohesion.

Educational Policies

As well as preserving current local food and drink production, we need to ensure skills and trades are taught and learnt by future generations in order to continue production. Agricultural colleges have been in decline, with more than 30 being closed down in the last 10 years, due to a lack of demand and the greater costs involved with training people in agriculture, compared with other trades.

As David Henley, Principle of Bicton Agricultural College describes:

‘It costs more to train someone in agriculture than it does to train someone in hairdressing, yet we receive the same funding per student’.

This has led to a loss in people teaching and studying agriculture. To reverse this trend, more investment needs to be made in agricultural studies and in agricultural apprenticeships and training schemes.

8. LIFE BEYOND NUFFIELD

During my Nuffield Scholarship I have been involved in the planning and master planning of a major urban extension of the City of Exeter. My brothers and I happened to own land in an area designated for development by Exeter City Council. We are passionate about the area we live in and would like to see a new development that is a sustainable living environment, which has an inclusive community with homes that are accessible for everyone. We would like it to be a place where people will want to live, where they feel comfortable and safe, with ready access to essential facilities.

We are critical of recent large scale developments that have been delivered in our locality. Too often they lack a sense of community and an identity, and do not fit well with their local environment. My brothers and I feel we have the passion, vision, understanding and determination to be able to help create a development that we and the local community are proud of. Hence, rather than selling the land to a developer, we decided to put our knowledge and skills into planning the development ourselves.

My study has been invaluable in shaping the decisions I have and will continue to make on the planning of this development. I have seen first hand how globalisation and mass production have negatively impacted on local communities, showing a need for communities to become more self-sufficient and for us all to live in a more sustainable way, making us less vulnerable to global changes. I therefore wanted to provide tools for the residents of the community to live a more sustainable lifestyle.

Houses will utilise the latest eco-friendly technologies and low carbon energy resources. Facilities will be built within walking distance of the houses and footpaths and cycle paths will be provided, reducing the need for cars. We will also be investing in a rail halt, bus service and a community car share scheme.

Devon is known for its beautiful landscape, wildlife, quaint villages and quality of environment and consequently lifestyle. We need to protect this to ensure people continue wanting to live in the area and to sustain tourism. Therefore, our housing design will reflect the area's local, cultural and historical context and we will ensure the development is sensitively aligned with environmental, landscape and biodiversity considerations by creating wildlife corridors, ponds, streams, woodlands and open public space.

My Nuffield experience also taught me how communities can thrive and become more sustainable through working together and supporting one another. Therefore, I feel it is vital to create a community hub in the centre of the housing development, giving residents easy access to facilities and areas where they can share experiences.

The development proposal includes large open spaces and extensive recreational facilities, including a multiple use games area and football and rugby pitches for the community to enjoy. It also includes, community orchards and allotments to encourage local food production. These areas will be linked with a new school, a community hall, doctor's surgery, community shop and market square, giving the community a focus and a community hub.

The new primary school, which could be an academy or free school, could encompass an ethos of healthy living and sustainability, pulling together all the community facilities. We believe offering these integrated services, facilities and education will provide the community with the tools and support to live healthier, more enjoyable and more sustainable lives.

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