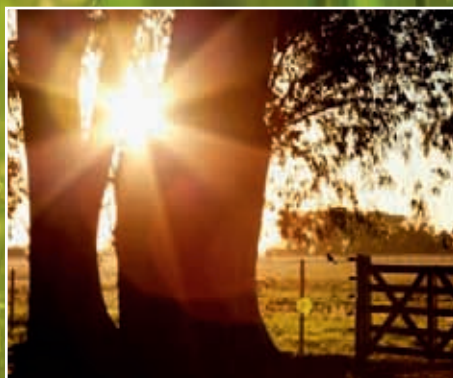


FARMING DELIVERS FOR BRITAIN

Farming's role in the nation's future





President's Introduction

It is not so very long ago that farming was seen in some political and academic circles as an industry in terminal decline, which delivered nothing more for Britain than a series of animal disease crises.

That was never a correct assessment of the industry's prospects or value, but it was one that gained damaging traction, and was responsible for a serious lack of balance in Government policies for farming and caused a debilitating loss of confidence within the industry itself.

It was in order to challenge this misconception that the NFU launched the "Why Farming Matters" campaign in 2006. That re-stated and, in time, re-established the case for a productive farming industry in 21st century Britain; so successfully that, six years on, no serious politician or commentator any longer queries the value of an efficient, productive, environmentally-conscious British farming sector, in a global context of growing pressure on food supplies, resource depletion and climate change.

British farming is back on a more even keel now. Output and incomes have been rising and the prospects are good. But that doesn't mean that the challenge facing farmers and growers is any less daunting. A decade ago, it was survival, in the face of hostile markets, falling incomes and political indifference. Now, it is to achieve a significant increase in the industry's output, and to do so in ways that make the optimum use of increasingly scarce resources and which enhance, rather than damage, the environment: to produce more, but impact less.

At the same time, the range of outputs expected of the industry has been widening. Farmers and growers are no longer simply producers of raw materials for the food industry. That is still an important role, especially in a period in which food security can only move up the list of national priorities, but to it have been added the imperatives of producing safe, high quality, sometimes local and organic food; of providing what are known as 'eco-system services', like landscape management, water quality and flood risk reduction; and of making a vital contribution to renewable energy supplies.

In the NFU, we decided that it was time to move on from explaining why farming matters to Britain, to measuring and recording the very real benefits which farming delivers for Britain. In so doing, we wanted to move away from the inward-looking yardstick of farm incomes as being the be-all and end-all of the industry's success, to an outward-looking series of indicators measuring farming's contribution to the economy, the environment, renewable energy, employment and careers and the security and quality of the nation's food supplies.

We will regularly measure our progress at rising to the challenges we face, and delivering what it is the country needs and expects of its farming industry. No-one who reads this report can doubt the value and the range of the benefits that farming delivers for Britain. It is our firm intention that no-one who reads future such reports can doubt the extent to which farmers and growers are delivering even more.

This report covers a huge amount of ground and includes a wealth of striking statistics. But what I believe emerges from it most powerfully is a single message: that farming is delivering for Britain.

From this it follows that while the future of the industry remains largely in its own hands, there must be a strategic approach to food policy from within Government: to ensure that the UK can build and maintain its own food security, to allow the agri-food sector to play a central role in driving economic growth, and to ensure we meet our obligations in helping to feed a growing global population. This responsibility must be accepted across Government, replacing the piecemeal and sometimes contradictory approach to policy making that has been a feature of UK food and farming policy in recent years.

An explicit Government commitment to policies that will help the farming and food sector fulfil its potential is not a special measure for a stand-alone industry, but a commitment to the country's future well-being and prosperity.

Peter Kendall
NFU President



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FARMING DELIVERS FOR FOOD



Food security – being able to access sufficient food, at affordable prices – is becoming a major national policy priority, as global demand for food soars in response to population increase and economic growth.

In 2010, Britain's farmers and growers supplied 60% of the nation's food, and 74% of the sorts of foods that can be grown in this country¹. These figures have fallen in recent decades. We will need to reverse that trend and ensure that they are higher in the future, to guarantee British consumers a secure supply of top quality food.

On food quality and safety, Britain leads the world. The Red Tractor guarantee of farm assurance now appears on over £11 billion of product at retail level².

Local food is another British farming success story, with a retail market valued in 2011 at almost £6 billion (Mintel). Farm shops, direct online retailing and farmers' markets have added hugely to the richness and diversity of the British food scene, whilst more and more pubs, restaurants and hotels are making a point of sourcing from the farmers and growers in their areas.

Britain's farmers and growers are already playing a vital role in delivering a secure supply of safe, top quality food to suit every palate and every pocket. The challenge for the future is to deliver even more of it, without compromising on either environmental performance or quality. To achieve this, we need to see a better functioning food chain that will stimulate continuous investment.

60%
In 2010, Britain's farmers and growers supplied 60% of the nation's food.



When buying British food, consumers are contributing to the nation's economy.

Delivering food security

Ever growing pressures on the global food system mean that it will make even more economic and environmental sense to make the most of our own food producing resources in the future.

Volatility in commodity markets since 2007 has shaken global food markets. With stocks depleted and demand from emerging markets rising all the time, supply and demand have been on a knife edge, with just small changes in supply prospects causing big swings in prices. Some of the world's major exporters, such as Argentina and Russia, have become more inward looking, restricting commodity exports. Rather than becoming freer and more transparent, the global food market is in some respects becoming more restrictive. As oil prices rise, so the cost of shipping and flying food huge distances around the world is becoming more prohibitive.

Greater self-sufficiency does not mean limiting or reducing exports. If particular products, such as grass-fed beef, lamb and dairy products, can be produced more efficiently in Britain than elsewhere in the world, then it makes sense for us to export them; and it means that the additional productive capacity which this will bring on stream will be available to boost production for the domestic market, should that be needed in the future.

Global availability of food can no longer be taken for granted. What is more, the persistent decline in food self-sufficiency within the UK since the mid-1980s means that we are more exposed to shocks in the global food system than for many years. Whilst security of supply does not automatically require greater self-sufficiency, nothing is more secure than building a supply base at home.

Delivering food for Britain

British farmers know that consumers are faced every day with a wide choice of what food to eat. They know that the food they produce has to be high quality, tasty, fresh and affordable if consumers are going to buy it, in preference to the imported alternatives.

The fragility of the economy has made shoppers even more hard-headed in their approach to buying food. Families face a real challenge to maintain living standards as household disposable incomes stagnate relative to inflation. At the beginning of 2012, around half of consumers expected to be worse off and 40% no better off, with rising food, fuel and utility prices, no real wage increases and tax and benefit changes³. Only a small minority expected their situation to improve. Consumers are becoming thriftier, writing lists and sticking to budgets, making more of left-overs, cooking at home, making more frequent shopping trips and buying fewer items.

It is against this backdrop of austerity and belt-tightening that the farming industry is engaging with consumers on the food they buy and the importance of farming in continuing to deliver high quality, nutritious and safe food that is, above all, affordable. Because consumers still rightly expect that food respects high standards of animal welfare and avoids harming the environment.

At its base level food is our fuel but it is much, much more than that. The food that we buy and eat says much about who we are and what we stand for. Our food choices impact on our economy, our environment and our society. British farming is able to deliver against the entire spectrum of consumer preference, aspiration and expectation.



Delivering local food

Even in times of economic hardship, the British public has continued to see value in buying locally produced food. According to the Institute of Grocery Distribution (IGD), 41% of shoppers are prepared to pay more for locally produced food and 47% for higher welfare⁴. Mintel is forecasting that the retail value of local food sales will reach £6.2 billion by 2013, a rise of 31% on the 2008 figure.

Tesco has seen sales of 'local food' increase from £850m in 2009 to £1bn in 2012⁵ and all major retailers have plans to expand in this area: Sainsbury's recent '20 by 20 Vision' calls for a doubling in UK sourcing by 2020⁶.

The phenomenal growth in local food speaks volumes for both the people who buy it and the farmers who have understood what consumers want and have played to their strengths.

There are a number of reasons why we buy food that's produced locally. For some consumers, buying local food gives them the chance to support their local economy. The continuing drive for local sourcing means that consumers can decide to invest their money into their local economy by buying food from producers near to them. By buying British food, consumers are contributing to the nation's economy and helping to drive our economic recovery.

But for many consumers, what matters is the sheer quality and taste of the unrivalled range of foods that come from across the British Isles. From Welsh lamb to West Country beef; Yorkshire rhubarb to Cumberland sausage; Lincolnshire cabbages to Kentish strawberries; Cornish new potatoes to Herefordshire apples; Stilton cheese to Dorset Blue Vinney, the choice is endless.

Not only can consumers buy different foods but they can choose to buy different foods from different regions too, and not only that, they can take advantage of our changing seasons to buy fresh food when it is at its very best.

Delivering quality food



British farmers invest huge amounts of time, effort and resource into complying with standards that set them apart from other global producers and give confidence to consumers that the food that they eat has been produced to a specific set of production criteria.

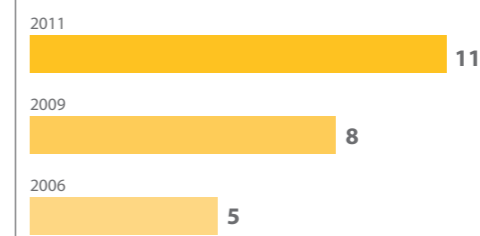
The Red Tractor logo, carrying the Union Flag not only guarantees that food has been produced in the UK but also that it meets good standards of animal welfare as well as respect for the environment. These standards not only reinforce already exacting requirements of UK legislation but go further to ensuring that food is produced according to the demands of consumers.

The response from consumers has been hugely encouraging. A YouGov poll, published in April 2012, found that 64% of UK shoppers – 16% up on 2011 – say they support the Red Tractor and are positively influenced by it when deciding what food to buy.

The Red Tractor provides a solid benchmark for quality assurance. However, many farmers and growers have gone even further to meet consumers' demands by being part of quality assurance schemes which may be linked to farming systems, like organics and conservation grade, or which involve higher animal welfare standards, such as with Freedom Foods, or are linked to environmental performance, such as the LEAF Marque accreditation. If consumers want it, then Britain's farmers and growers will deliver it.

Retail value of food and drink products carrying the Red Tractor logo

Net sales value of products (£bn)



Source: Assured Food Standards



Global availability of food can no longer be taken for granted.

Delivering food in quantity

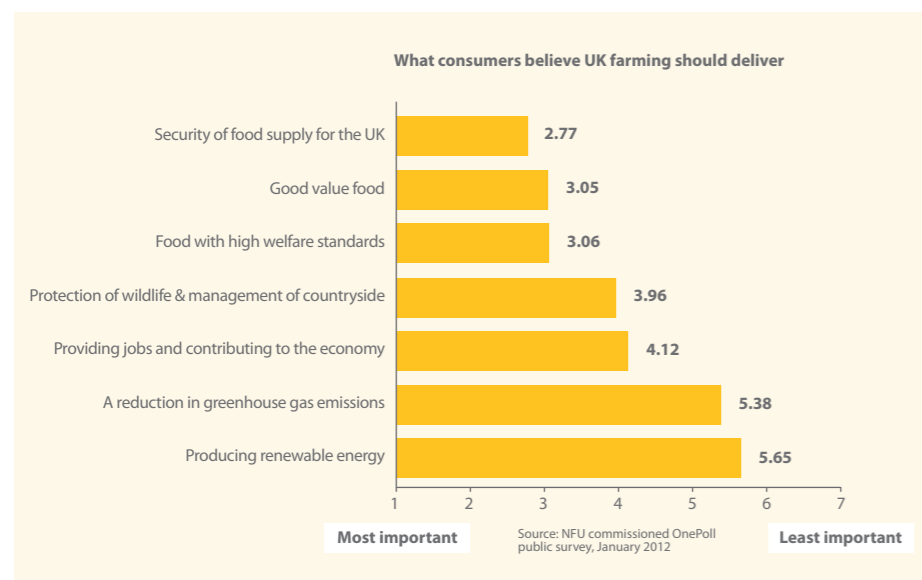
British farming is about much more than niche, value-added or local specialities. It's also about delivering production on a large, efficient scale – be it wheat for bread and biscuits, milk for processing, cereals for animal feed or beet for sugar. Producing for commodity markets certainly does not mean that standards or quality are not important – in fact the vast majority of these types of production are covered by exacting farm assurance schemes.

Attention to detail, technical expertise and a relentless focus on costs have made British farms in this category amongst the highest yielding and most effective in the world.

Farming delivers for the Olympics

The 2012 London Olympic Games gave a once-in-a-lifetime opportunity to show off the quality and variety of British food to the world. As a member of the London 2012 Food Advisory Group and in chairing the two food supply sub-groups, the NFU played a major part in developing the ground-breaking Olympics Food Vision to ensure that the food served at the Games would be of the highest standards and encouraged the development of a more sustainable catering and hospitality industry.

NFU consumer poll



The Food Vision ensured that all of the sorts of food that could be produced in Britain at the time of the Games must be UK Red Tractor assured, with a proportion of food being required to meet aspirational standards such as Organic and Freedom Foods.

According to the Vision, all meat, traditional British cheeses such as Cheddar, other dairy products and where seasonally available, fruit, vegetables, salads and cereal based products must be UK Red Tractor assured. Additionally all eggs must be British Lion mark and free range.

The intention now is to build on the experience with the Olympics to set similar standards for the food sourced by public procurers such as Government departments, the police and the National Health Service. Indeed, progress is already being made, with the Greater London Authority Group (which includes the London Fire Service, the Metropolitan Police and Transport for London) taking its cue from the London Food Board to procure food to the Olympics standards from now on.

As a further legacy, most of the 16 catering companies supplying food for the Games have already changed their business models to incorporate Red Tractor quality assured British food as a major part of their offer.

Delivering sustainable food

The sustainability of the global food system has long been called into question by environmental groups. Many of our major companies are already taking steps to address some of these challenges, be they stewardship of the world's fisheries or responsible sourcing of palm oil. But it will always be easier to work with suppliers who are 30 or 300 miles away rather than 3,000.

British agriculture has a good story to tell: improving water quality, stewardship of biodiversity, resilience to drought and climate change, a temperate, maritime climate, strong consumer scrutiny of the supply chain and the rule of law. All of these factors indicate that British farming is well on the way to becoming considerably more sustainable than many of our key competitors around the world.

Some of our major food companies and retailers have entered into partnerships with farmers to address the sustainability of their supply chains. But more work is needed to broaden these relationships across the farming sectors and to develop them in a way that meets environmental objectives, and provides farmers and growers with sustainable returns.

Delivering for consumers

Farmers want to have an open and honest debate with their most important customers – the British public – about how agriculture has changed and how it will continue to change as it responds to the challenge of producing more food for a growing population whilst impacting less on the environment.

Farmers want to be able to talk to consumers about the tough decisions and trade-offs that will have to be made to ensure that they are able to continue to produce the food that consumers have rightly come to expect.

And consumers can have a much greater degree of influence over how their food is produced by having that debate with their own farmers, rather than with producers thousands of miles away across the globe.

What's needed?

The steps we ask people to take are simple:

**MAKE IT BRITISH
MAKE IT LOCAL
MAKE IT HAPPEN**



So when buying food we ask people to choose items they know are produced locally, items with Red Tractor identifying its quality production standards and items with the Union Flag identifying it as food from Britain. In that way they can be sure that they are choosing British food, supporting Britain's farmers and having a say in the debate.

From Government, we need action to ensure much greater transparency in terms of where food comes from and how it is produced. Better origin labelling of foods needs to be extended across all categories so that consumers are no longer deceived by misleading indications. Government also needs to ensure the supply chain works fairly and that abuse of power, wherever it lies, is eliminated.

Above all, there will need to be a major shift in the way the food supply chain works, moving away from the current short-term approach based on quarterly profit performance towards long-term relationships that are built on trust and fairness involving all links in the chain.

The more enlightened major food buyers already realise the need to get closer to British farmers.

By working even more closely and collaboratively in future the whole supply chain can ensure that it is sustainable and continues to deliver what consumers are looking for.

Red Tractor is a quality mark with standards covering food safety and hygiene, animal welfare and environmental protection. The flag in the logo guarantees the origin of the food.

CASE STUDY

Jon Hammond illustrates how modern productive farming with a close eye on environmental protection can lead to Olympic-sized opportunities.



The Hammond family has been farming just outside Nottingham for more than a century and today at New Farm grows 1,600 acres of crops in rotation including wheat, barley, oilseed rape, carrots, leeks, cabbage and rhubarb.

The Hammonds were farming in a sustainable manner long before the term was fashionable, with credentials including Red Tractor assurance, LEAF marque certification and a long-term involvement in agri-environment schemes. Over the past 15 years, 10km of hedgerow have been planted or laid at the farm and more than three hectares of woodland created.

The business began washing, processing and packaging produce in 1990, founding Hammond Produce Ltd. In 2002 it became one of eight East Midlands-based farmers and growers to form Sherwood Produce. Now farming almost 6,500 hectares, the group's turnover stands at in excess of £20 million and, at peak times, employs more than 350 people.

However, it's the quality of the food that remains the key to success and the reason why their produce will end up on plates in London Olympic venues in the summer of 2012 via specialist fresh produce company, Pauley's. Jon Hammond is proud to be involved: "The work of the NFU to influence the development of the Olympics Food Vision has provided an opportunity to showcase British farmers and the food they produce to one of the most multicultural gatherings of people in history."

"It's pleasing to think that our Red Tractor carrots or leeks may be eaten by gold medal winners or a member of the Olympic family, but equally if not more important are the food service legacy opportunities that the event is helping to create."



FARMING DELIVERS FOR ANIMAL WELFARE



British livestock farmers go to great lengths to provide high standards of animal welfare for their animals and they have been quick to respond to consumer demand for higher welfare products.

The concept of farm assurance was pioneered by British farmers, and the Red Tractor now serves as the over-arching assurance standard which embeds animal welfare improvements into all its scheme requirements. Schemes such as Freedom Food, owned by the RSPCA and which focuses solely on animal welfare, are available for consumers for whom welfare is particularly important.

£400m
invested to
convert old-style
'conventional' cages
to 'enriched colony'
cages to meet new
European standards.



Good welfare on farms large and small is not a question of scale or system... it's a question of stockmanship.

The Five Freedoms and stockmanship

Underpinning all livestock farming in Britain are the 'Five Freedoms':

- Freedom from hunger and thirst – by ready access to fresh water and a diet to maintain full health and vigour.
- Freedom from discomfort – by providing an appropriate environment including shelter and a comfortable resting area.
- Freedom from pain, injury or disease – by prevention or rapid diagnosis and treatment.
- Freedom to express normal behaviour – by providing sufficient space, proper facilities and company of the animal's own kind.
- Freedom from fear and distress – by ensuring conditions and treatment which avoid mental suffering.

They provide the cornerstone for our farm animal welfare legislation, husbandry standards, and farm assurance requirements, with high levels of stockmanship skills recognised as the primary method of delivery.

Some people argue that 'big is bad' for animal welfare. But the reality is that good welfare, on farms large and small is not a question of scale or system. It's a question of stockmanship, where farmers ensure their animals' needs, as far as the Five Freedoms are concerned, are met. Farming is a dynamic sector, like any other and systems will change and diversify over the coming years. A small number will choose for various reasons to house their stock continuously. Many livestock farms will get bigger in terms of the number of stock they keep. On these larger farms specialist stockmen or vets will be employed exclusively to manage the health and wellbeing of the animals, since good welfare is critical not just to the wellbeing of animals, but their ability to produce meat or milk. It becomes the empathy and knowledge of the stockman that is the most important factor for the animals' welfare and which is the difference between a good welfare system and a bad one.

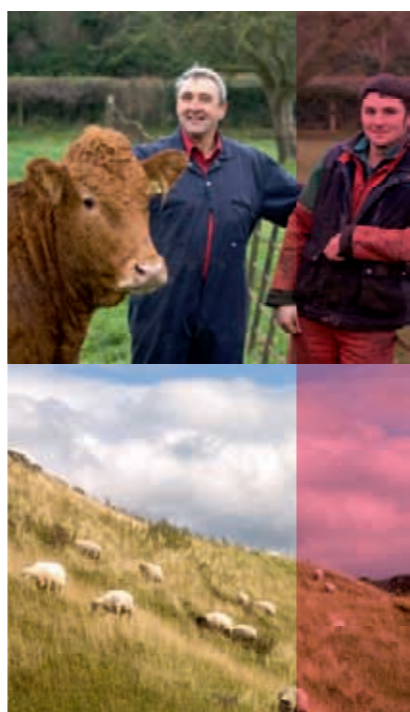
Embracing change

Our knowledge and understanding of animal welfare is constantly evolving and British farmers and their research organisations are leading the way in tackling the key welfare challenges.

The UK pig industry has spearheaded the drive for improving the way that we measure welfare. By looking at the pig, rather than the system in which it is housed or reared, they have chosen five welfare indicators and are currently trialling a large-scale industry study that has been funded by pig farmers' own money. A welfare audit is carried out by vets in conjunction with the farmer and provides a useful tool to help the farmer benchmark his system and make welfare improvements on his farm where necessary. It is the intention that this audit will form part of the quarterly vet review within farm assurance. Similar initiatives are being rolled out in other livestock sectors as well. DairyCo, for instance, funded by dairy farmers, has trained its extension team in reading 'cow signals' as a means of establishing levels of dairy cow welfare on individual farms. This concept was first developed in the Netherlands and can be used, for example, to modify building design so that the welfare of the cow is always a priority, regardless of whether the animal is kept inside or out.

When consumers buy British eggs they can be confident that the hens have been kept in higher welfare systems too.

British farmers have recently invested £400 million to convert old-style 'conventional' cages to 'enriched colony' cages to meet new European standards and all laying hens in Britain now have nesting and perching space, a scratching area where they can exhibit their natural behaviours, enhanced stocking densities and unrestricted access to feed. All birds, regardless of the system, have access to a nest box where they can go to lay their eggs. This reflects one of the most significant changes to animal welfare improvements in the poultry sector and has been a major financial commitment for the farmers. The message has gone out to retailers and the food service industry to support the UK poultry farmers by pledging to buy our higher welfare eggs.



Over a decade ago, major changes were introduced across Europe to pig welfare laws, and in particular to housing, space requirements, floor areas, hospital pens, and the need to provide material for pigs to play with. All EU Member States must be fully compliant by 2013 yet Britain has been on the front foot with this and sow tethers and stalls were outlawed in the UK as long ago as 1999. It is a sad fact that two thirds of all of the pig meat imported to the UK – and imports account for 60% of the total market – is currently (2012) produced in systems which would be illegal in Britain⁷.

Towards even better welfare

Farmers and their organisations are working with the scientific and veterinary communities across a whole range of initiatives to improve animal welfare standards still further. These initiatives carry no legal incentive and are not just in response to public demand for higher welfare; they also reflect the fact that farmers recognise that happy animals are also healthy and productive animals. Some of the initiatives focus on very specific issues, such as improving animal mobility or fertility. Others look to make broader improvements to the animals' health and welfare by supporting farmers and vets working together to prevent disease rather than having to react and cure it once it is there.

CASE STUDY

Duncan Priestner has invested £2.5 million on improved welfare cages to comply with an EU directive which bans the use of 'battery' cages to house laying hens.



Work to convert and rebuild the sheds housing his 120,000 hens at his farm in Lymm, Cheshire started in 2007. New colony cages provide 750cm² per bird along with a nest box for the birds to lay their eggs in, perches for the birds to roost on at night and a scratching area, so hens can perform natural behaviours.

Computerised ventilation maintains the temperature at an accurate 21°C and important information such as water use, mortality, bird weight, egg numbers and size is recorded by the technology used in the sheds.

Duncan points out that traditional stockmanship is more important than ever as the new systems are complex and mean staffing levels have been increased.

He has seen at first-hand what the changes mean in welfare terms. *"The birds flap and run around more than ever and I hear a 'happy noise' when I walk into the sheds," he said. "They look healthier, there is a much lower mortality rate and they interact together. Egg farmers in this country produce eggs to suit all purse strings but all consumers can rest assured that they are buying eggs from higher welfare systems."*

In January, across the EU, conventional 'battery' cages were officially banned. However, producers in some other EU countries did not meet the deadline to move out of battery cages causing considerable anger among British farmers.

The number of farmers and growers that are part of the Red Tractor Assurance chain

 **78,000**



FARMING DELIVERS FOR THE ECONOMY



Agriculture's headline contribution to the UK economy, at 0.6% of gross value added (GVA)⁸, seriously understates its real value.

Bear in mind that farming is the foundation stone of the food and drink industry. Add in the value of its output and you are left with a total farming and food sector worth some £85 billion, the equivalent of 6.9% of GVA⁹.

Because of its role as the driving force behind so much economic activity, farming offers huge potential to the economy as a whole. The growth which has been achieved in recent years is already paying dividends, with the value of food exports up by 11% in 2011, making food and drink the fourth largest export sector¹⁰.

But farming is also important to jobs, both on and off the farm. In all, the farming and food sectors provide over 3.5 million jobs¹¹, and while technology means that employment on the farm will inevitably fall over time, that does not apply to food processing and, as we have seen recently, even employment on the farm can be safeguarded if the sector is thriving and output is growing.

Confidence in the industry is arguably stronger today than at any other time in at least the last two decades. Yet regulatory challenges and inconsistencies remain. The industry has always had more than its fair share of red tape, and there is the potential for this to be overlaid with 'green tape'¹², whether driven by European or domestic policy makers. Confidence bodes well for agriculture and the wider economy, but Government must recognise that policy is an essential catalyst to translate this confidence into investment.

Together, farming and food make up a precious oasis of growth and potential at a time when the economy generally is struggling. If the Government is looking for a sector to help re-balance the economy, it need look no further than farming.

£85bn
Total farming and food sector worth some £85 billion, the equivalent of 6.9% of GVA.



For every £1 that farming contributes to the UK economy, our food manufacturers and wholesalers contribute a further £5.

Farming delivers growth

It is important to consider agriculture's economic performance in the context of the wider economy. The UK continues to make a slow recovery from recession. At the end of 2011, the size of the total UK economy in Gross Domestic Product (GDP) terms was still some 3.9% smaller than it was at the start of 2008¹³.

Analysts don't expect the UK to recover to 2008 output levels until 2013. In addition, unemployment numbers had risen to 2.67 million by the start of 2012 and you have to go back to November 1995 to find a higher unemployment rate than the current 8.4%.

Against this backdrop of faltering growth and a challenging labour market, agriculture has been something of a success story and is contributing to a rebalancing of the economy. Agriculture's contribution to the economy as measured by GVA (Gross Value Added) is at its highest since 1996. GVA totalled £8.84 billion in 2011, a year on year increase of 25%¹⁴. This has been achieved through the increased value of farming's gross output, which has grown from £14.59 billion in 2005 to £23.65 billion in 2010¹⁵.

Farming has even been creating more jobs on the farm. The latest Defra June Survey figures show that between 2010 and 2011 the national agricultural workforce grew by 2.2% to 476,000 – that's 10,000 more people working on farms in the UK¹⁶. The bottom line is that, in the past five years, farming has become a more productive and profitable sector, with the years since 2008 representing the best performance for farming since the mid-1990s.



Better financial performance is also filtering through to confidence in the sector. The most recent NFU confidence survey showed a year on year increase in business confidence, and suggested that some 50% of farmers are looking to increase production in the next five years¹⁷. That level of optimism makes a marked and very welcome change for the sector and is a clear signal that farmers are looking to invest in their businesses for the long-term.

This is all good news for agriculture but it is also positive for the wider economy. Agriculture is just one part of the agri-food supply chain. For every £1 that farming contributes to the UK economy, our food manufacturers and wholesalers contribute a further £5¹⁸. Going further along the supply chain, UK shoppers spend some £174 billion on food and drink products at retailers and foodservice outlets each year¹⁹. Collectively, the agri-food sector accounts for 6.9% of the GVA of the UK economy and employs 13.6% of the nation's workforce²⁰.



Farming delivers exports

The food sector has also been a successful area when it comes to UK trade. Exports of food and non-alcoholic drinks grew by 11% in 2011 to £12.2 billion, building on an 11.4% increase in export earnings in 2010²¹. Food and drink has become the UK's fourth largest exporting sector, with exports recording their seventh successive year of consecutive growth to reach record breaking levels. Agricultural goods are prominent among the stand-out performers.

For example, the dairy and meat sectors both recorded impressive growth in the first half of 2011, increasing by 30.5% and 21.0% respectively²².

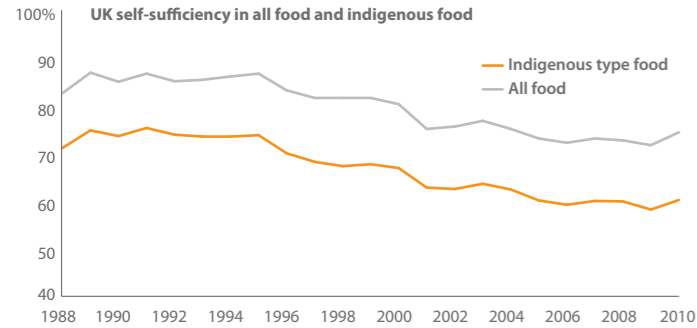


There is a tremendous opportunity to replace the UK's increasing reliance on imports with domestic production.

Farming can deliver even more

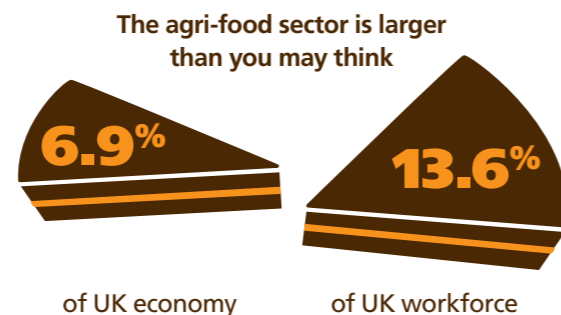
The key question is whether agriculture can build on this recent success? The short answer is yes, and there's certainly potential for our farmers to produce more. The UK's ability to meet its food needs has fallen over the last two decades as illustrated in the chart below. Increasingly, we've turned to imports to fulfil our domestic food demand. This gives a tremendous opportunity to replace the UK's increasing reliance on imports with domestic production. In addition, the UK population is set to top 70 million by 2027²³. To rely on imports shifts the burden of increasing production on to others and makes us dependent on increasingly volatile international markets. This last point is crucial and it's no coincidence that some of the highest levels of food inflation through 2010/11 were for products where we have low levels of domestic production²⁴.

However, due to a combination of low farm incomes in the past, and chronic under-investment in agricultural science, UK farm productivity has plateaued in recent years and we are in danger of falling behind some of our major competitors. Additional resources for agricultural science are part of the solution here, but we also need a different attitude to science itself – one that welcomes and encourages innovation and new techniques in food production, rather than being driven by a mixture of nostalgia and suspicion.



Source: Defra Agriculture in the UK 2010

Producing more is not just about limiting our reliance on imports. Although the biggest pressures of food security will be faced by the poorest countries in the world, the UK is by no means exempt from the challenges surrounding it, and owes it both to its own people and the rest of the world to play a full part in meeting those challenges. Our farms are amongst the most productive in the world and we should enjoy genuine competitive advantage in sectors such as dairying and grass-fed livestock. There is an obvious need to capitalise on these factors, so making our own contribution to both national and global food security and building on the export success that our agri-food sector has already generated.



Demand for food worldwide, improved farm profitability and growing confidence among farmers and growers are all positive indicators that augur well for growth. However, it would be wrong to underestimate the challenges ahead. Future growth must be achieved against a backdrop of both reducing farming's environmental footprint and adapting to unprecedented volatility in agricultural commodity markets. Farmers will need a stable, supportive policy framework in which to operate, if the industry is to commit the investment that its long-term potential undoubtedly justifies.

The key components of such a framework are:

- A fair outcome to the CAP reform negotiations that allows farmers and growers in England and Wales to compete on equal terms in the EU.
- Effective delivery on the de-regulation agenda.
- Fiscal policies that encourage investment.

Farming has emerged strongly from the recession. Yet today's farming industry is about more than simply providing the food we eat; it is about preparing for the challenges of tomorrow. Whether that is expanding food production or providing the raw materials for our expanding renewable energy sector, agriculture's future success will have wider economic implications. The resonance of a strong farming sector will be felt beyond farm businesses and beyond rural Britain, with true success delivering benefits for our food manufacturers, exporters and shoppers.

In a very real sense, a thriving farming industry is good for Britain.

CASE STUDY

In less than a decade dairy farmer Rhys Williams built a dairy business from scratch milking more than 1,500 cows across two farms in North Wales.



He has drawn on experience from working on dairy units in New Zealand to bring an innovative joint venture business model to the Llyn Peninsula.

After agricultural college Rhys started work at a dairy farm near his home in Padog, North Wales. But it was on working visits to New Zealand that he got the "grass bug" – seeing how a low-cost input such as lush pasture can generate good returns.

In the southern hemisphere Rhys saw how new entrants could get started through share farming systems. Starting as a waged worker, there is a clear path to building your own herd of cows until you share the milk cheque 50/50 with the landowner, effectively a fast-tracking process for potential dairy farmers aiming to build their own business in the industry

Rhys met current business partner –Welsh farmer and landowner David Wynne Finch – in 2004. When Rhys saw David's vacant 300 hectare former beef and sheep farm he knew it was the perfect location for a dairying business – with the Gulf Stream meaning there is an almost year-round supply of grass.

Rhys was able to build up his stake in the business until in the fourth year David proposed setting up a limited company with the pair having equal shares. They have since converted another 130 hectare unit where Rhys milks 450 cows, in addition to the 1,100 at the first farm.

At peak times Rhys now employs 15 people on his farms and is confident about the future of farming in Britain. It's this optimism that has fuelled his expansion and seen Rhys invest more and more time in recruiting and developing a skilled workforce.



FARMING DELIVERS FOR THE ENVIRONMENT



Centuries of farming have helped shape the countryside of England and Wales.

The arable fields, pastures, hedges, copses, ponds, ditches, in-field trees, even the heaths and moorlands are there because of the way that the land has been farmed; and as they were created in the past, so they are managed now – by farmers.

There has, however, been one very significant change in this picture, in the last 40 years or so. Whereas landscape management was once merely a by-product of farming, now it is a very important end in itself. Some two thirds of the farmland in England and Wales is now being actively managed under an agri-environment scheme, so as to produce beauty and biodiversity, as well as food and fuel⁽²⁵⁾.

But there is more to the environment than the physical landscape or the wildlife that depends on it. Farmers are now expected to play their full part in reducing pollution, improving water quality, protecting soils and combating climate change. The challenge facing farming is to produce more, but impact less. In this chapter, we show how the industry is already delivering on the second part of that equation, and on the potential that exists to do even more.

Only 1%
of the water
abstracted from
groundwater,
rivers and streams
is used for
crop irrigation.



The proportion of rivers in England designated as being of 'good biological quality' was up from 63% in 1990 to 73% in 2009.

Delivering on water quality, flood risk reduction and soil protection

Productive farming depends upon fertile soils and clean water, so it is hardly surprising that farmers prioritise the protection of these vital national resources. Indeed much of the country's water gathering grounds, whether over aquifers or around reservoirs, are on farmland. This places special responsibility on the farming community to reduce the impact of their production activities on water, whether from fertilisers, manures or pesticides.

Water quality has been improving. The proportion of rivers in England designated as being of 'good biological quality' was up from 63% in 1990 to 73% in 2009, with similar improvements in the chemical quality of rivers and in levels of nitrate and potash²⁶. Changes in cropping practices and livestock manure management reflecting both stricter legislation (e.g. Nitrate Vulnerable Zones) and better farm practice (such as nutrient management plans and soil conservation) have contributed to improving water quality. Between 2006 and 2011 the proportion of farms with a nutrient management plan increased from 42% to 62%²⁷, while every Single Payment Scheme claimant is required to have completed a Soil Protection Review.

But in the decade ahead new water quality targets must be met, set under the EU's Water Framework Directive. Thus farming, like other sectors, must do even more to improve water quality. Regulators and Government could contribute by simplifying and localising environmental priorities in a more coherent way. This should make clear the local challenge whether at county or water catchment scale, and support and promote industry-led activity.

The farming community has also been making a very conscious effort, through the Voluntary Initiative, to improve the way that pesticides are used so as to reduce pollution, improve water quality and avoid risks to both wildlife and human health. Thanks to the VI, over 14,000 sprayers and 20,000 spray operators now undergo regular testing to ensure professional competence and effective use²⁸, contributing to a sustained 30% reduction in already very low pesticide levels in key water catchments.



Farming delivers responsible water use

Farmers know as well as any group the value of water and are acutely aware of their responsibility to manage water well.

Most farms (70%) rely on the mains for their water supplies, although this rises to 90% for pig and poultry units, all of which is metered and paid for²⁹.

Even though only 1% of the water abstracted from groundwater, rivers and streams is used for crop irrigation³⁰, this can be vital to maintain food production in a drought year, like 2011 or 2012. Water used for irrigation is licensed by the Environment Agency, meaning that absolute limits apply to the quantity and timing of abstraction. In times of drought these licences can be suspended or varied. Water resources necessary for UK food production should be ring-fenced so that this vital resource is not 'lost' to other parts of the economy.

Some 18% of farms abstract water to irrigate food crops and this comprises the largest volume of water used on farms. The majority of those using large volumes of water do so more efficiently now than five years ago and have plans for further improvement, if sufficient capital is available. We would strongly encourage the Government and regulators to work with the industry to promote water efficiency, investing in water harvesting and storage and water use in growing crops and feeding livestock. Fiscal incentives (e.g. capital allowances) and legislation should be directed to enable long-term investment on farm.

Delivering farmland biodiversity

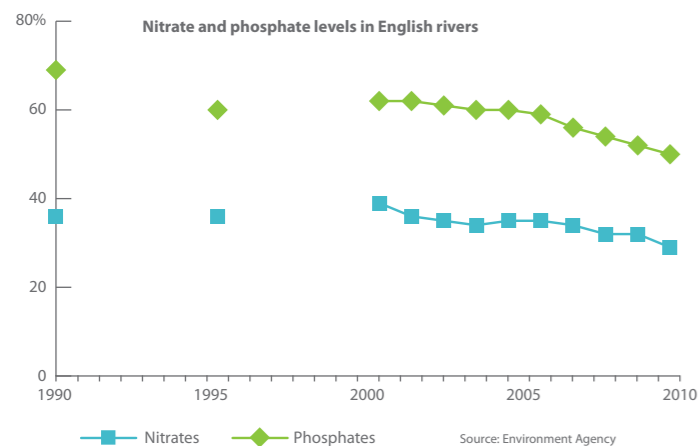
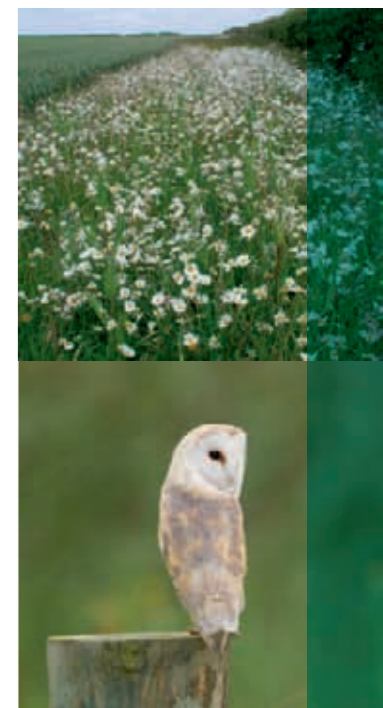
The nature of farming has a profound impact on wildlife in the countryside. So it is not surprising, given the extent of the changes in farming systems over the last half century, with food production more than doubling, that wildlife populations should have been affected. Changing practice (such as a switch from hay making to silage or from spring to winter-sown cereal crops) will inevitably alter the food and habitats available for wildlife.

Yet as well as producing a lot more food, Britain's countryside is still rich in wildlife, and farmers and conservationists are working hard to find new ways of improving the quantity and quality of wildlife across our countryside.

Encouragingly, some species have made significant gains: the otter, buzzard, barn owl and sparrowhawk, all 'top predators', have benefited from less persecution, habitat creation and effective pesticide stewardship³¹. The pipit bat has also increased in numbers and populations of traditional farmland species like the brown hare are healthy and stable³².

While these high points reflect better farming practice, there remain big challenges: populations of half the 'farmland priority species' (listed in the Government's Biodiversity Action Plan) are declining and populations of some species of farmland birds (such as the skylark) and butterflies show a significant decline over numbers found in 1970³³. Whilst the issues arising from that are being addressed, it is important to note that an index covering a more representative sample of the sorts of birds commonly seen on farmland – the so-called 'farmland generalists' – points to a much more encouraging picture³⁴.

Farmers manage many of our most precious wildlife sites, such as Sites of Special Scientific Interest. About half of these SSSIs are farmed, the majority in the uplands where sheep graze 350,000 hectares of specially protected heather moor and hill fells. Natural England reports that 95% of this farm-managed SSSI is in good or recovering condition. Significantly, given that this was once a serious problem, only 1% of SSSIs are now judged to be over-grazed³⁵.



Six million hectares of English farmland and 770,000 hectares in Wales in agri-environment schemes.

Farmers are willing environmental stewards. In 2005, Defra launched Environment Stewardship, which for the first time allowed most farms to be rewarded for their environmental management. In the years since then the number of participants in Defra schemes has grown massively, so that in January 2012 two thirds of English farmland (6.1 million hectares) was in an agri-environment scheme, up from 2.5 million hectares in 2005³⁶. Similar progress has been made in Wales where 777,695 hectares have been entered into agri-environment schemes³⁷.

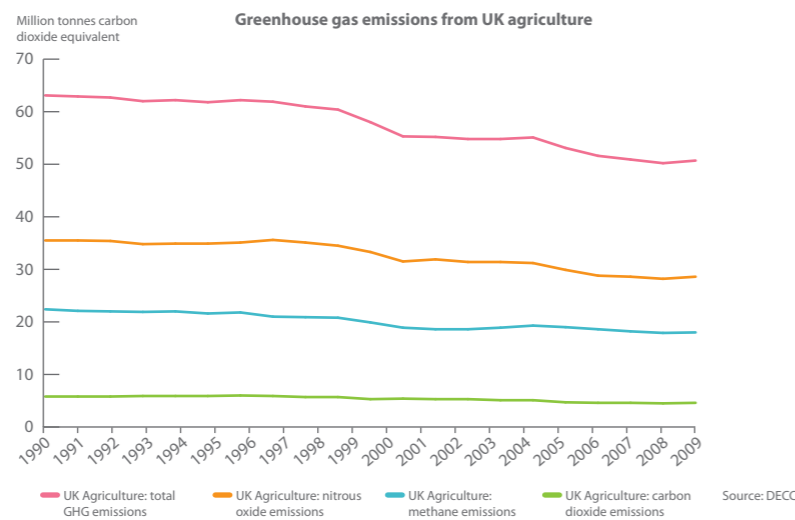
Much of this investment which farmers and taxpayers have made in the farmed environment over the last 25 years could be put at risk by some of the ill-judged concepts currently being discussed in the context of CAP reform. At the very least, it is essential that current farm conservation agreements are allowed to count towards any 'greening' requirement as part of the finalised CAP reform agreement.

However, it is not quantity alone that protects the countryside – 58% of measures in whole farm ELS agreements are considered of 'high value' by Natural England (Natural England 2012).

Farmers are also active outside Government conservation schemes too. The Campaign for the Farmed Environment (CFE), led by the farming community in partnership with key conservation organisations, is also having a major impact on farm practice, and is helping farmers to deliver greater biodiversity, both inside and outside official stewardship schemes. Since it was launched in 2009, the CFE has resulted, as at spring 2012, in over 190,000 hectares of land being managed voluntarily as wildlife habitat, and 75,000 hectares entered into key priority options in Environment Stewardship³⁸.

Farming delivers greenhouse gas reductions

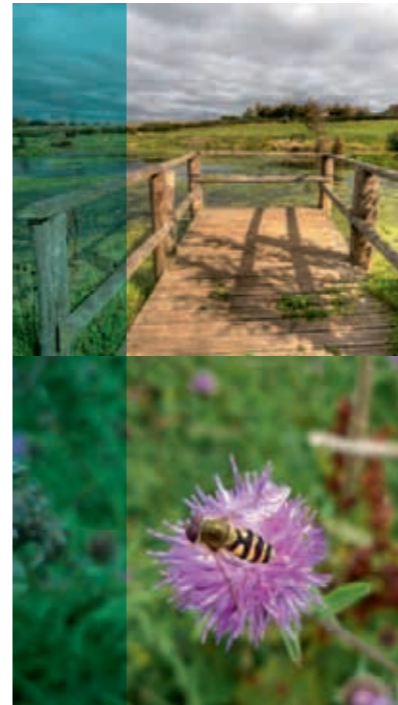
As the chart below shows, emissions of greenhouse gases from British farming have been cut by 19% since 1990.



This reduction has been due mostly to a decrease in livestock numbers, which has helped reduce methane emissions, and lower applications of fertiliser, which have cut the estimated emissions of nitrous oxide. However, further reductions in greenhouse gas emissions cannot rely on reducing livestock numbers alone, rather improved efficiency of agricultural production should play a larger role. Smarter, more precise farming systems are the way forward, and Government-funded research will help the agricultural sector to measure its progress.

In line with other parts of the economy, the agricultural sector has agreed with Government an action plan to manage and reduce its greenhouse gas (GHG) emissions. A wide range of agricultural industry bodies, including the NFU, have committed to playing their part in tackling climate change by reducing GHG by three million tonnes of CO₂ equivalent per year from 2018-2022. The aim is to meet this challenge without compromising domestic production. To produce less and import more would merely serve to export our emissions to other parts of the world. The GHG action plan focuses on how farmers and growers, across all sectors and farming systems, can become more efficient to help reduce greenhouse gas emissions and make cost savings per unit of production.

In looking at the carbon 'balance sheet' for British farming, it is important to remember, on the credit side, the millions of tonnes of carbon that is locked up in our soils, particularly in the uplands and grassland farming areas. Grazing livestock may produce significant amounts of methane, but we should carefully protect and manage the carbon stocks represented by the pastures that they graze.



CASE STUDY

James Voysey's dairy farm located in Axminster in Devon is benefiting from a scheme supporting farmers to take voluntary action to protect water bodies and the environment. The fourth generation farmer has a herd of 300 dairy cows and grows crops which are used as winter feed.



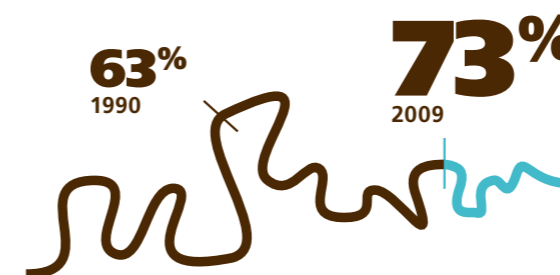
The family has grown maize crops for much of the last 25 years but growing conditions are far from ideal with the farm located 700 feet above sea level in a particularly cold pocket. Here maize doesn't mature until late October or November meaning it is usually too late to sow another crop.

When the heavy winter rains came this exacerbates soil run-off into rivers. As early drilling boosts ground cover, James completed a soil management plan with his Catchment Sensitive Farming (CSF) officer responsible for the River Axe partnership to devise a solution.

CSF, run by Natural England, helps farmers and land managers improve water quality in their local rivers and other water bodies, whilst also making farm business savings. James now grows a wholecrop lupin mixture which can also be harvested in August, allowing an autumn sowing to take place of either grass or winter cereals to protect the soil.

Through CSF he also benefited from a grant to renew the concrete yard allowing water to be separated reducing the wastage of clean water which joined dirty water in the slurry pit. Most recently, with advice from the partnership, he worked to fence off areas of the stream running through the farm where drinking cows stir up silt and damage the ecology of the watercourse.

"Catchment Sensitive Farming helps you identify situations on the farm before they arise and our adviser Bryn Thomas is very knowledgeable," James said. "No farmer wants to see soil running off his land as not only is our livelihood at stake but we want to pass on the land in good condition to the next generation."



Amount of England's river length considered to be of good biological quality as a result of help from farmers



FARMING DELIVERS FOR CAREERS



Farming will need to deliver tens of thousands of new career opportunities over the coming years, if the industry is to fulfil its mission of producing more, whilst impacting less.

The Institute of Employment Research estimated in 2009 that some 143,000 farmers and farm-workers would retire or otherwise leave the industry by 2017³⁹. Allowing for the fact that increasing scale and further mechanisation will mean that fewer people are required actually to work on the land, that still adds up to a requirement for 60,000 new farmer and farm-worker entrants⁴⁰. In reality, it could be even more than that, with Defra's statistics showing that, between 2010 and 2011, far from declining, the UK farm workforce actually increased, with total employment up by 10,000 (2.2%) to 476,000⁴¹.

These new jobs in farming won't be just any old jobs. A life on the land in the 21st century isn't just about wellies, shovelling muck or early starts. As farming becomes ever more diverse and technologically driven, many of these jobs will be for skilled workers: people who can operate complex equipment, or manage sophisticated computer programmes, or supervise large-scale crop and livestock production, or take responsibility for the all-important disciplines of customer relations.

Making a start in farming in your own right isn't easy these days; it never has been. But there are plenty of examples where young people have started farming in a small way, in their spare time, and have built up their businesses to the point where they provide a full-time livelihood. But whether as farmers, farm-workers, farm managers, vets, machinery engineers, agronomists, conservation advisers, research scientists, horticulturalists, farmhouse food producers or any one of countless other land-based roles, the opportunities will be there.

2.2%
The UK farm workforce increased between 2010 and 2011 by 10,000 (2.2%) to 476,000.



There are many opportunities to start an apprenticeship through agricultural colleges

Apprenticeships

Apprenticeships are one way to enter the industry. They offer work-based training programmes for people who really want to succeed in their chosen line of work but who feel a full-time academic or vocational course is not the right option for them. As employees, apprentices earn a wage and work alongside experienced staff to gain job specific skills. Apprenticeships are open to learners of all ages and are also suitable for existing employees. There are many opportunities to start an apprenticeship through agricultural colleges who will often look to work with farm businesses interested in hiring an apprentice. With the increase in tuition fees, there is the potential for more people to consider apprenticeships as an alternative route into the industry, and the trend is already on the increase.

Apprenticeship starts in agricultural crops and livestock in England are rising, with 440 starts in 2008/09, increasing to 730 in 2009/2010 and to 850 in 2010/2011⁴².

Land-based colleges

The land-based colleges offer a world-beating range of courses designed to equip people of all ages with the skills and knowledge needed to make the most of the many career opportunities in agriculture and related industries. The content of courses is constantly changing according to industry needs, and many now have more of an environmental focus, covering subjects such as renewable energy, anaerobic digestion and solar energy capture, as well as other non-food uses of crops now on the syllabus. Courses also aim to develop students' communication and numeracy skills and use of IT and social media.

Formal qualifications such as full-time certificates or diplomas will usually take a couple of years to complete. These full-time programmes almost always contain a substantial element of work experience obtained in a commercial environment. Alternatively, students may secure formal qualifications by attending college on a part-time basis, or as part of an apprenticeship programme. On completion, students may continue onto Higher Education or choose to start work. Higher Education usually comprises higher diploma or degree level qualifications offered by universities and colleges. Degree courses sometimes include a professional placement year that allows students to experience a real working environment. A wide range of taught post-graduate and research programmes are now available through both specialist colleges and universities.

Fresh Start

Industry initiatives to encourage new entrants into the sector are also underway. One such initiative is Fresh Start and its farming academies. Fresh Start has over the past six years endeavoured to help bring new entrants into farming but with a particular emphasis on supporting the business and entrepreneurial skills required to get new farming businesses started and developing them for the future. The academies so far have been across England and provide an environment in which to discuss ideas and learn business and management skills from industry professionals. In 2011 the first specialist academy was launched for the pig industry. Fresh Start is now developing this approach and working with many organisations to provide sector specific training academies for the dairy sector and uplands.



On-the-job training opportunities

Continuing Professional Development (CPD) and training is vital to the efficient running of farm businesses and the professionalism of the industry. Whether it is keeping up to date with new technology, or with changes to legislation, it is essential both for business success and personal development.

Farming's record in providing on-the-job training is improving all the time. According to Lantra UK Skills Assessment 2010/2011, the land-based sector is one of the biggest spenders in terms of expenditure per employee in England. At £3,125, that is the highest of any sector and is almost double the national average. Professionalism is also on the increase, with sector-specific skills recording schemes already in place for pigs and poultry sectors, whilst the industry's AgriSkills Forum is working to extend the approach more generally. Measuring and recording skills development will help demonstrate the competence and professionalism of the industry to customers, employers, regulators and also importantly, to new entrants and students interested in a career in agriculture.

A career for all ages

The impression is often given that farming is an ageing industry. But those figures showing that the average age of farmers is somewhere between 50 and 60 are misleading. Whilst it may be the 'old man' who is still the nominal head of the business – and therefore gets picked up by the statistics – it is the children or even grandchildren who are in charge day-to-day in very many family farming businesses.

Even taking the figures at face value, at the last count there were 7,500 people under the age of 35 who held farming businesses in their own name in the UK, rising to 42,200 for those under the age of 45⁴³.

Useful website addresses

National Apprenticeship Service:
www.apprenticeships.org.uk

Landex: www.landex.org.uk

CASE STUDY

Self-starter David Camp typifies the ambition of the new generation of farmers in this country.



The organic beef and sheep tenant farmer kicked off his farming career in 2000 with no land. Today the 29-year-old has nearly 750 acres spread across four farms in South Devon. Here he has 500 head of cattle, including a 180-strong South Devon beef suckler herd, plus 350 breeding ewes.

David secured his first 150 acre farm tenancy in 2001 after working as a self-employed farm worker. In March 2007 David was successful in tendering for a farm in Harbertonford with a house and some buildings adjacent to land he already rented on a 10 year tenancy.

David chose to convert all his land to organic as it made good commercial sense. He has carved out a strong market by selling the majority of his produce to a local organic meat box retailer, receiving a premium price over conventionally finished beef. However, it's not been a straightforward journey and David has lost cattle to bovine tuberculosis on and off over the last ten years.

In Spring 2011 David received a blow when he was given notice to quit the farm he had secured in 2007. But he bounced back in the summer of 2011 when offered a 230 acre organic farm just 10 miles away in Loddiswell.

David's resounding optimism means he is philosophical about the challenges he has faced: "We have now expanded to 610 acres of rented land, 30 acres of owned land with some buildings, and 100 acres on grass keep. It was a big knock when we were given notice but it certainly shows that when one door closes another opens."

David is currently vice-chair of the NFU's Next Generation Forum, set-up to put forward younger members' views on current policy developments.



FARMING DELIVERS FOR CLEANER ENERGY



Farming could be delivering as much as a quarter of the cleaner energy Britain will need over the coming decades, creating and sustaining thousands of jobs in rural communities and helping to power rural homes and workplaces.

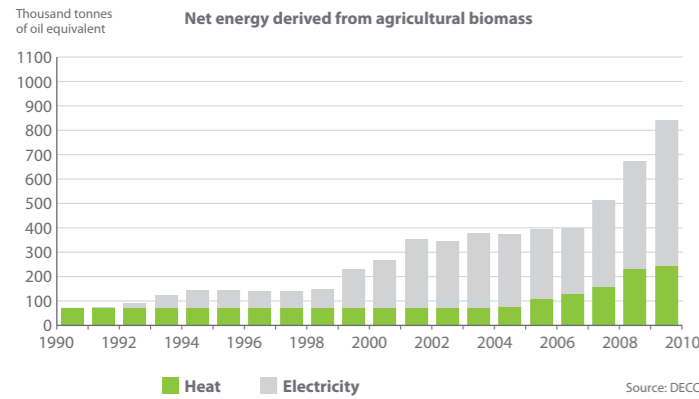
This low-carbon green future is closer than you might think – because of the need to tackle climate change, and because of concerns about Britain’s future energy security.

Farmers and growers are excited already about embracing new technologies that harness energy from the land, the sun and the wind. As in many other advanced countries, the contribution of agricultural bio-energy to Britain’s economy has been growing steadily over the past decade⁴⁴. Biogas digesters, wind turbines large and small, solar roofs, solar fields and biomass boilers are all becoming more commonplace in the countryside – and they are very much part of the NFU’s vision for the future of the agricultural economy.

20%
of farmers
and growers
will be producing
clean electricity
by mid-2012.



By 2020, there could be as many as 1,000 anaerobic digestion plants on farms.



Progress to date

Farmers are already delivering on the cleaner energy challenge. The NFU estimates that more than 130 megawatts of “solar farms” were operating on agricultural land by April 2012⁴⁵. Including farm rooftop systems, the likely total is already about 200 megawatts (MW) of agricultural PV out of nearly 1,000 MW installed in the UK so far, which is enough power to meet the annual needs of around 40,000 households.

The NFU survey found that by mid-2012:

- Almost one third of all agriculture will be involved in some form of renewable energy production and supply.
- One in six NFU members will be generating solar power.
- 20% of farmers and growers will be producing clean electricity.

According to the European Renewable Energy Directive, by 2020 renewable energy in the UK should be meeting 15% of our total energy needs – about one-third of all electricity, 14% of heating and 10% of transport. The land-based renewables (wind power, solar, micro-hydro, ground source heat and the many forms of bioenergy) can make a significant contribution towards these goals – around 8% of the national renewable electricity supply by the end of this decade, as well as a growing source of domestic fuels for heating and transport. We estimate that replacing fossil fuel energy sources with land-based renewables could reduce UK greenhouse gas emissions by the equivalent of 12 million tonnes of CO₂ by 2020.

This isn't a question of 'food versus fuel'. Many forms of renewable energy production are complementary to food production, making valuable use of materials such as crop residues which would otherwise go to waste. Even the manufacture of biofuels such as bio-diesel from oilseeds and bio-ethanol from wheat – which is essential if we are to meet our renewable transport fuel targets – provides valuable co-products as feedstock for the livestock sector. Given an appropriate level of incentive to kick-start the necessary investment, the potential is enormous.



The potential for the future

There is huge potential in every area of clean energy for farming to play a major part. By 2020, there could be as many as 1,000 anaerobic digestion plants on farms, as well as the deployment of 5,000 solar roofs on farm buildings, the baling of millions of tonnes of extra straw to support both existing users and new energy markets, and the growing of new low-input energy crops that support biodiversity while deriving a farming income from the land. Farmers may become the suppliers of district heating services to rural communities and businesses, and the production of sustainable transport fuels from agriculture together with home-grown animal feeds is expected to grow substantially.

In the near future, we expect the diversification of farming into renewable energy production to become as important as tourism in terms of its significance and contribution to the wider rural economy. Farmers and growers with an additional source of income from renewable energy will contribute to sustainable development, no longer so dependent upon depleting fossil fuel resources, and able to invest more in all-round efficient resource management – with benefits in the form of improved yields and farm profitability.

Less than a hundred years ago, most farms lacked an electricity supply and were reliant upon the land itself to provide them with fuel for heating and traction power (wood and agricultural residues were burned, while horses ate oats and hay grown on as many as a quarter of all fields). Agriculture has the potential to regain this past sense of self-reliance, using more modern and efficient technologies that can turn our sector into a future energy exporter.

Almost one third of all farmers and growers across England & Wales are involved in some form of renewable energy production and supply



CASE STUDY

A pioneering project in Oxfordshire illustrates how farmers can work with local communities to generate cleaner energy.



Organic farmer and environmental entrepreneur Adam Twine farms 1,200 acres at Westmill Farm and for over 25 years has also been National Trust tenant at Colleymore Farm.

In 2004 he established Westmill Co-op to construct and operate a community-owned wind farm at Westmill Farm. It was the first wind farm in the South of England and has 2,374 members, who invested the £4.6 million equity needed for the construction of five turbines – and who now own the wind farm and receive dividends on their investment.

The wind farm started commercial generation in February 2008 and is rated at 6.5 MW (megawatts) and produces about 12 GWh (gigawatt-hours) of electricity per year, equivalent to domestic electricity usage for over 2,500 homes.

Following this, a planning application for 30 acres of solar panels, to the east of the wind turbines, was approved in December 2010 after strong local support.

As the fast track review of the Feed-in Tariff rates for large scale PV systems created considerable uncertainty, private finance was sought as time ran out to raise money either through a share offer or via a bank loan. The newly formed Westmill Solar Co-op has a call option on the project and is now seeking to raise £15 million to purchase the site from the current owners.

The 5 MW solar park was commissioned in July 2011; it consists of 20,260 polycrystalline PV panels which generate 4.4 GWh/year.



Summary

Farming delivers for food

- Security of supply – UK is 74% self-sufficient in foods we can produce here.
- A buffer against price volatility – the less we import, the less vulnerable the UK is to price spikes on world markets.
- Top quality – the Red Tractor, guaranteeing high standards, now appears on food products with a retail value of £11 billion.
- Local produce – boosts the rural economy, gives consumers the chance to make a powerful statement about the food they value.

Key indicators of future progress

- Reverse long-term decline in self-sufficiency.
- Increase UK sourcing by public authorities in the UK.
- Increase value of products carrying the Red Tractor logo.
- Increase value of local produce sales.

Farming delivers for animal welfare

- High welfare standards – the recognition that stockmanship, rather than management system or scale, is the main driver in improving animal welfare has been the key to recent developments and investment across the food chain.
- New ways of protecting animal welfare through farm assurance standards – by looking at the animal, rather than the environment in which it is kept.
- Science and research innovations to improve welfare still further – farmers and their organisations are working with the scientific and veterinary communities across a whole range of initiatives to improve animal welfare on farm.

Farming delivers for the economy

- Growth – agriculture's contribution to the economy as measured by Gross Value Added (GVA) increased by 77% to £8.8 billion between 2006-11.
- Exports – the value of UK food and drink exports rose for the seventh successive year in 2011, by 11% to over £12 billion, making this Britain's fourth largest export sector.

- Employment – the farming and food sectors employ some 3.5 million people, and the total number employed directly in farming increased by 10,000 between 2010 and 2011.

Key indicators of future progress

- Increase in UK agriculture's GVA.
- Increase in value of UK farm output.
- Increase in total factor productivity (in line with major EU competitors).
- Increase in value of UK farm and food exports.

Farming delivers for the environment

- Landscape management – around seven million hectares of farmland in England and Wales – that's 70% – is managed under an agri-environment scheme. The UK spends a higher proportion of rural development funding on environmental improvement than any other EU Member State.
- Biodiversity – otters have returned to every English county, after almost becoming extinct in England in the 1970s. Populations of other wild mammals, such as deer and foxes are flourishing, whilst bat numbers have increased by 20% since 2000.
- Better water quality – the percentage of rivers in England of "good biological quality" has risen from 63% in 1990 to 73% in 2009, with a similar level of improvement in chemical quality and in levels of nitrate and phosphate.
- Greenhouse gas reduction – emissions of GHG from British farming have fallen by 19% since 1990 and the industry is fully engaged in a Greenhouse Gas Action Plan.

Key indicators of future progress

- Proportion of agri-environment agreements in high priority options.
- Stable index of generalist farmland birds and fewer farmland 'specialists' in decline.
- Proportion of water bodies at good ecological status.
- Greenhouse gas emissions from farming falling per unit output.

Farming delivers for careers

- Apprenticeships – apprenticeships starts in agricultural crops and livestock in England have risen by over 90% in the last three years to 850 in 2010/11.
- Career opportunities – according to Lantra, British farming will need to recruit at least 6,000 new entrants every year up to 2020 to replace those leaving the industry. Many of the new jobs will be highly skilled.

Key indicators of future progress

- Number of apprenticeship starts in farming in England.
- Uptake of skills training in farming.

Farming delivers for cleaner energy

- Solar power – one in six NFU members is now estimated to be generating solar power, and so contributing to the 200 megawatts of solar energy – enough to power 40,000 households – being produced from British farms.
- Clean electricity – it is estimated that by mid-2012, at least 20% of farmers and growers will be producing electricity from renewables, and that almost one third of British agriculture will be involved in some form of renewable energy production.
- Climate-friendly power – replacing fossil fuel energy sources with land-based renewables could reduce UK greenhouse gas emissions by the equivalent of 12 million tonnes of CO₂ by 2020.

Key indicators of future progress

- Output of solar power from British farms.
- Proportion of farmers in England and Wales involved in generating clean energy.
- Number of AD plants on farms in England and Wales.
- Total contribution of land-based renewables to national renewable energy goals.

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Thank you for taking the time to read this report. The NFU will be taking these messages out to the British public to explain all the positives that farming delivers as an industry. The campaign will be using a number of tools and events to communicate these important messages. To play your part and lend support you can:

Visit the website www.farmingdelivers.co.uk for more information about the campaign, latest news and videos.

'Like' the campaign on Facebook and keep up-to-date with the latest activities – visit www.facebook.com/farmingdelivers

Throughout 2012 the NFU will be at shows and events to promote the campaign – visit the Farming Delivers for Britain website for more details.

If you would like any more information about the campaign please contact us – email farmingdelivers@nfu.org.uk, write to NFU, Campaigns Department, Agriculture House, Stoneleigh Park, Kenilworth, Warwickshire, CV8 2TZ or call **024 76 858500**.

Most importantly you can help our farming industry to deliver even more for ourselves and future generations by seeking out British produce. Remember...

MAKE IT BRITISH | MAKE IT LOCAL | MAKE IT HAPPEN 

Red Tractor is a quality mark with standards covering food safety and hygiene, animal welfare and environmental protection. The flag in the logo guarantees the origin of the food.

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