www.defra.gov.uk

Sustainable Farming and Food Strategy: Forward Look

July 2006





Foreword by Rt Hon David Miliband MP, Secretary of State for Environment, Food and Rural Affairs

I said in my first week as Secretary of State that farming matters – it is important not just for the countryside but for the whole country. And within my own Department, farming is not separate from the rest of it, but central. In a changing world we all face many challenges, but perhaps the greatest among them is to learn to live within the limits of our natural resources. Currently we are not: we are living as if we had three planet's worth of resources to use rather than one. Our farmers, who produce the food we eat, are clearly on the front-line. Nothing can be more fundamental to the long-term economic success of their businesses than the sustainable management of the land and the resources they, and we, depend upon. We need to redress the balance and move towards "One Planet Farming" – farming that reflects the need for us to live within the means of the planet, and farming which helps us live within the needs of the planet.

Equally, as consumers we all have a role to play, in ensuring that our patterns of consumption respect environmental limits. For the farming and food sector this presents real opportunities both to meet the demand for high quality, seasonal or locally sourced produce delivered through strong local food chains and, importantly, to help deliver our future energy needs.

Government is a huge consumer itself, and our procurement policies can make a massive difference to the achievement of our environmental goals. On this, as in other areas where we can have a direct impact, you will need to judge us by our actions not our words.

We now need to build on the excellent work that has been put in place over the last three years through the Sustainable Farming and Food Strategy at both national and regional level. Under Sir Don Curry's leadership much has already been accomplished, and we have important frameworks for future progress in key areas: the Food Industry Sustainability Strategy; the Animal Health and Welfare Strategy for England; the Farm Regulation and Charging Strategy; and the Biomass Task Force Report. There is more to do, but our long-term goals remain the same, namely to:

- build a profitable, innovative and competitive farming and food sector that meets the needs of consumers;
- enable farming to fulfil its unique role in the countryside, by making a net positive contribution to the environment, managing its risks, especially animal health risks, effectively; and
- contribute to the long-term sustainability of rural communities.

If we are to succeed we need the kind of entrepreneurship, innovation and enthusiasm in the farming and food industries that I have already witnessed in my short time as Secretary of State. And we need a fundamental reform of the European policy framework in line with the Government's CAP Vision paper, in particular an eventual end to market price support and direct payments. Government must provide support too – funds to pay for public goods that the market will not otherwise provide; regulation to help promote a profitable industry that shares the burden of preventing and responding to animal health risks; negotiation to deliver an undistorted market in Britain, Europe and across the world, and persuasion to promote a higher level of demand for home grown produce.

This is an agenda for future success that needs to be shared by Government and its agencies, regional and local delivery partners, NGOs, the third sector and farmers, food processors, retailers and consumers themselves.

There are, rightly, big challenges for farmers, for other stakeholders, and for Government. Key decisions are yet to be taken on some vital elements, such as the size and shape of the Rural Development Programme for England, the precise mechanisms to achieve our water and climate change objectives in relation to farming, and the next round of CAP reform.

This Forward Look is the next step, but not the only step we will need to take, in the process of delivering our shared priorities for farming and food under the Sustainable Farming and Food Strategy. It points the way towards my vision of "one planet farming" and will, I hope, prove valuable in strengthening the commitment to this important agenda of all those engaged in its delivery.

David Miliband

fail lieber

Contents

		Page
Executive Summary		7
1.	Setting the Context	9
Deli	ivering the Strategy	
2.	Succeeding in the market	16
3.	Improving the environmental performance of farming	21
4.	Sustainable consumption & production	27
5.	Climate change & agriculture	35
6.	Animal health & welfare	41
7.	Cross-cutting issues	43
	 Effective delivery mechanisms & institutions 	44
	– Communication	47
	 Better use of regulation and other policy instruments 	48
	– Advice	48
	- Training & skills	49
	Evidence, R&D & technology	50

Executive Summary

- 1. This Forward Look builds on the Sustainable Farming and Food Strategy (SFFS) published in December 2002. It sets out the Government's priorities for delivering a sustainable farming and food sector, consistent with the principles set out by the Rt. Hon. David Miliband MP, Secretary of State for Environment, Food and Rural Affairs in his speech, "One Planet Farming" at the Royal Show on 3 July 2006: to develop a profitable and competitive domestic farming industry which is a positive net contributor to the environment, while reducing the environmental footprint at home and abroad of our food consumption. To realise that vision, the farming and food sectors will need to be flexible, innovative and responsive to change. While Government must provide the support, policy and regulatory framework required to achieve a sustainable future.
- 2. The Forward Look marks a new stage in the pursuit of a sustainable farming and food sector. It is structured around **five priority themes**, which are closely inter-related, a reflection of the inter-dependence of the economic, social and environmental pillars of sustainability. Many of the actions contributing to each theme are already underway, reflecting the widely acknowledged view that the overall direction and goals of the Strategy continue to be relevant today and into the future. Over the period ahead, activity must be focussed on those areas that can make the biggest difference to achieving our goals, and to refining and developing those policy mechanisms that will work best. The five themes are:
- 3. **Succeeding in the market**: a core element of the SFFS, flowing from the Policy Commission's recommendation to reconnect farmers with their market and strengthen the links between the numerous elements in the food chain. Following the CAP Reform of 2003, the key challenge here is for farm businesses and the food chain collectively to move away from dependence on subsidy, and towards a more professional business-focussed approach, based on greater awareness of market opportunities, including for diversified enterprises, the benefits of collaboration and co-operation, and the acquisition of skills needed to exploit these new opportunities.
- 4. **Improving the environmental performance of farming**: the critical importance of farming practices for the environment our landscape, our wildlife and biodiversity, the quality of our soils, air and water cannot be over-stated. Although there has been real progress in building environmental responsibility into mainstream farming practices, there remain important issues to be tackled in terms of environmental protection, resource management, and pollution control.
- 5. **Sustainable consumption & production**: The Sustainable Farming and Food Strategy recognised that public support for farming in England was not just about recognition of the public goods, such as the quality of the countryside, that farming can contribute to, but was also about meeting the demand from consumers for more environmentally sustainable, healthy food. Our farming industry is well placed to meet these demands. At the same time, the significant environmental footprint of the farming and food sector, can be reduced by encouraging production and consumption patterns of food with lower environmental impacts, creating opportunities for added value throughout the food chain.

- 6. Climate change & agriculture: Farmers are in the front line and could be seriously impacted by a changing climate, such as more frequent storms, heat stress, or increased pest and disease risk. It is vital that farmers recognise the scale of the challenge they face, and play their full part, alongside other economic sectors, in addressing it. The way land is managed can contribute to reducing the likelihood of, and damage from, extreme flood events, and to halting the decline in soil carbon. The farming sector currently contributes about 7% of total UK Greenhouse Gas (GHG) emissions even though it contributes less than 1% of GDP. These are mainly of non-CO2 greenhouse gases, with agriculture accounting for 46% of methane and nearly 67% of nitrous oxide emissions in the UK in 2004. Mitigation of these emissions can make a valuable contribution to our climate goals, and farmers need to exploit every opportunity to reduce them. Farmers also have important new opportunities to grow crops novel to the UK, and to expand the production of bioenergy and other non-food crops which can help to reduce overall UK carbon emissions.
- 7. **Animal health & welfare**: this affects all three pillars of sustainability: economic at the farm level where good animal health and welfare is crucial to delivering strong economic performance, and nationally through reducing the costs to the economy of a major disease outbreak; environmentally because how animals are kept impacts on the environment and biodiversity; and socially consumers and society rightly demand high standards of animal health and welfare.
- 8. While individual policies and actions under these five priority themes can play a significant role in delivering change on the ground, several key cross-cutting themes are embedded within the Strategy which influence and provide support for such policies, giving greater impetus to the behavioural change required in the farming and food sectors. These are:
 - Effective delivery mechanisms and institutions
 - Communications
 - Better use of regulation and other policy levers
 - Advice, training and skills
 - Evidence, R&D and technology
- 9. The broad coverage and cross-cutting nature of the SFFS means that its successful delivery hinges on **effective partnership working and a shared understanding and ownership of SFFS objectives.** Although the central players are the farming and food industries themselves, and Government and its agencies, there are also crucial roles to be played by others including RDAs, local authorities, local strategic partnerships, NGOs and the third sector.

1. Setting the Context

Introduction

- 1.1 This Forward Look builds on the Strategy for Sustainable Farming and Food (SFFS) published in December 2002¹. The Strategy responded to the key themes identified by the Policy Commission² on the Future of Farming and Food in England: in reconnecting farmers with their markets; in seeking fundamental reform of the CAP; in strengthening links in the food chain through greater collaboration and co-operation to create a more profitable farming sector that can compete successfully in increasingly open markets; in addressing the twin challenges of reducing environmental damage while enhancing the positive impacts of farm practices; in addressing the wider impacts of farming and food production, including the impact on climate change, on rural economies and communities, and on the nation's health.
- 1.2 A new relationship between industry and government envisaged by the Policy Commission formed the basis of the Strategy: a relationship in which, within 10-15 years, farming and food may be unsubsidised but not unsupported; one where Government plays its part nationally and internationally in setting out the framework for the future, but not one where there is a single blueprint for all to follow. On the Government's part we committed to reward farmers for the public benefits, such as landscape, biodiversity and access to the countryside, which would not otherwise be provided by the market; to take forward a balanced approach to regulation, using the 'polluter pays' principle where appropriate, but where regulation is required, to develop and enforce that regulation effectively; and to promote benchmarking and the spread of good practice up and down the food chain as ways of raising performance.
- 1.3 The Strategy identified challenges for industry too: to be flexible, entrepreneurial and close to their markets, suppliers and customers; to co-operate, innovate, raise their skill levels and make use of new technology; to be aware of and act on their environmental responsibility, whether it be the land they manage or issues surrounding packaging, waste, emissions and transport; and for the largest players, in particular the large processors supermarkets and food service companies, the Strategy identified a clear challenge to recognise their corporate responsibilities to the chain as a whole. All need to recognise and learn to manage the risks they face and be linked into and work with the communities in which they operate.
- 1.4 At the heart of the Strategy remains the desire to move the farming and food sectors to a sustainable position in which patterns of production and consumption minimise their impact on the environment, and where farming, in particular, maximises its role in the renewal of the natural environment. The ultimate goal must be for farming to make a positive net contribution to the environment, respecting the limits of our natural resources and nurturing them. In other words reducing its environmental footprint by not taking out more from the planet than we are giving back or "One Planet Farming". This concept was outlined by David Miliband, Secretary of State for Environment, Food and Rural Affairs, in his speech at the Royal Agricultural Show on 3 July 2006, when he called for a shared agenda for the future to be developed between Government and farming.

"Thirty years ago, if you said the country was living beyond its means, people would have thought about economics. Now, if you talk about the country, or the planet living beyond its means, you think about the environment" **Rt Hon David Miliband MP, 3 July 2006**

www.defra.gov.uk/farm/policy/sustain/newstrategy/strategy/strategy.pdf

² http://archive.cabinetoffice.gov.uk/farming/pdf/PC%20Report2.pdf

- 1.5 The Strategy set out a range of actions of varying nature and scope: some are now complete, others are ongoing, all are focussed on delivering behavioural change. In a sector made up of many thousands of small and medium-sized businesses who encompass the full range of economic and environmental performance industry and Government need to work together in partnership, at a national and regional level, to deliver the leadership and the policy framework required to enable change to be realised.
- 1.6 Change of the magnitude required will take time to achieve. Over the last year, the Government has reflected, with a wide range of stakeholders, on whether the Strategy remains a robust vehicle for change. We have concluded that it does. The underlying message is therefore that both the broad direction of the strategy, and the need for an effective partnership between Government and industry to drive forward delivery remain as valid today as when the Strategy was first published. Furthermore, the strategic outcomes identified in the Strategy (see box below), given their long-term nature, also remain valid.

SFFS Strategic Outcomes

Economic

- A farming sector focused on the market, successfully producing food and non food crops in a more efficient way to help enhance the incomes of competitive farm businesses
- Greater efficiency of the total food chain
- Reduced burden on taxpayers and the rest of the economy

Environmental

- Reduced environmental cost of the food chain
- Better use of natural resources
- Improved landscape and biodiversity

Social

- Better public health, in particular through improved nutrition and workplace health and safety
- Higher animal health and welfare
- More cohesive and productive rural communities

1. Setting the Context

- 1.7 However, since the launch of the Strategy in 2002 important aspects of the policy context have changed, notably the reform of the CAP in 2003. The public's understanding and perception of how and where their food is produced and the impact their buying decisions have on the environment have also evolved and continue to do so.
- 1.8 The delivery landscape since the Strategy was published has also altered and will continue to do so with the creation of Natural England in October 2006, and the new tools that can help us to deliver our priorities, particularly the new Rural Development Programme for England, which will run from 2007-2013.
- 1.9 Based upon the solid foundations provided by the SFFS, this **Forward Look** sets out the Government's current thinking about action underway or planned which will help to promote a profitable and competitive domestic farming industry which is a positive net contributor to the environment, while reducing the environmental footprint at home and abroad of our food consumption.
- 1.10 The SFFS is a strategy for long-term change, which needs to continue to evolve and be strengthened. David Milliband's vision for the future of farming and the establishment of both a new Delivery Group and Leadership Group under Sir Don Curry in spring 2006 provide added impetus. But they also demand a careful look at priorities and identification of where the greatest impact can be made. This is a process that must continue.

The farming and food sector

- 1.11 The role of farming and food production in this country runs wide, from the food we eat, to the environment and landscapes we value, to the vitality of rural communities. It touches every member of society every day. It is important for the whole country. As such it cuts across not just many of Defra's objectives but other Government Departments' priorities too.
- 1.12 **Economically**, farming is a fundamental component of the much wider UK Agri-food sector that accounts for 7.6% of the total economy (2004), provides 15% of the total workforce (3.8 million jobs). Farming itself contributes 0.7% to GDP (2004), and 2% to UK employment (4% in rural areas), but also has the potential to contribute through the production of crops for non-food uses. Over the last 30 years production patterns have been distorted by tariff barriers and market management mechanisms under the CAP. The CAP and associated trade protection is still a major influence on farmers' decision-making and as such a serious obstacle to building a profitable, innovative and competitive farming industry that is able to meet the needs of consumers and contribute to a better environment nationally and globally.
- 1.13 Reducing **environmental** impacts throughout the food consumption and production chain, from primary production, transportation, processing, retailing and final consumption is an essential part of the delivery of the Government's overall sustainable consumption and production goals. Sustainable Consumption and Production is a strategic priority for Defra. It places a focus on identifying products with the greatest impacts across their lifecycle and provides opportunities to identify and target products, production processes and consumption patterns to improve resource efficiency and reduce the overall environmental impacts of society.

- 1.14 The food industry accounts for: about 14% of UK business energy consumption and 7 million tonnes of carbon emissions per year; about 10% of all industrial use of the public water supply; about 10% of the industrial and commercial waste stream; and 25% of all HGV vehicle kilometres in the UK.
- 1.15 Farmers and land managers look after around 70% of England's land, their impact, both positive and negative, is therefore crucial to delivering key **environmental** objectives for landscape, biodiversity, soil, air and water quality, countryside access, waste management and increasingly, in tackling climate change agenda. Good land management practices protect and enhance our landscapes, conserve and encourage biodiversity, improve the quality of key natural resources and safeguard our natural heritage. The aim is for farming to fulfil its unique role in the countryside by making a net positive contribution to the environment.
- 1.16 However, the agricultural sector also contributes 7% of the UK's total Greenhouse Gas emissions (47% of the UK's methane emissions and 67% of nitrous oxide) and farmers are on the front-line both in terms of adapting to climate change and in mitigating its effects. With regard to water quality, over 60% of nitrates, up to 40% of phosphorus and the majority of silt in UK waters is due to agriculture. In addition, 85% of ammonia emissions, which are becoming the main driver of air pollution impacts on remote UK ecosystems, come from farming. Meeting EU objectives (most notably in the Nitrates Directive and the Water Framework Directive), and delivering the benefits of improved water quality will put pressure on the farming industry to adapt its practices in some parts of the country.

We believe that, properly rewarded and incentivised, farming can deliver a more varied and attractive countryside everywhere. In doing so, we believe, it will strengthen, not weaken, its long-term position and provide a lasting public good for its neighbours and stakeholders.

Policy Commission on the Future of Farming and Food, January 2002

- 1.17 From a **social** perspective, farming remains an important part of many rural communities, particularly in some more peripheral rural areas that are lagging behind economically, and where farming tends to represent locally a more significant part of economic activity. Securing a profitable and viable future for farming can help to contribute the long-term sustainability of rural communities.
- 1.18 There is a much greater awareness of the link between food and health (particularly obesity) which can in turn be used to help change consumer behaviour in a positive way, stimulating demand for fresh produce which is good for health and which our farming and food industry is well placed to provide.
- 1.19 High standards of animal health and welfare are also crucial for both the farming industry itself and the wider economy, as the Foot & Mouth Disease outbreak of 2001 demonstrated.

 Managing those risks effectively is a fundamental responsibility for both farmers and Government.

1. Setting the Context

Setting the direction of change

- 1.20 The farming industry in particular must go through a major period of change if it is to thrive in the future. It must adapt and respond to multiple and powerful drivers for change, including:
 - Climate change
 - Increasing global competition through greater trade liberalisation and growth of emerging markets
 - Further CAP reform, and adaptation to existing CAP reforms
 - Recognition that there are limits to the demands we can put on natural resources and ecosystems without destroying them
 - Changes in prices of outputs and inputs, such as the current high price of energy
 - The need to comply with European legislation, such as the Nitrates, Habitats and Water Framework Directives
- 1.21 The food industry is perhaps better equipped to respond to such changes: it is much less fragmented and has more sophisticated mechanisms to cope with changes in patterns of demand and other risks. However, there are significant challenges ahead in respect of resource use and impacts, managing waste and mitigating the effects of climate change.
- 1.22 The Strategy embraces two broad principles which are fundamental pre-requisites to delivering change:
 - First, the Government, industry and its delivery partners must work in partnership with shared objectives and shared ownership of outcomes;
 - Second, that while Government can provide support, leadership, the appropriate policy framework, and strategic direction, ultimately the industry itself has the ability to shape its own destiny and deliver the behavioural change required.
- 1.23 The Strategy provides context, direction and coherence to the wide range of individual policies, schemes and initiatives, which, whether Government or Industry-led, support and impact upon the farming and food sectors, helping the industries towards a more sustainable future. The individual elements within this Forward Look are important in their own right, but taken together provide a much greater momentum for change.

"We need a vision for farming and how we manage land in this country that inspires future generations" **Rt Hon David Miliband MP, 3 July 2006**

The Rural Development Programme for England, 2007 – 2013

- 1.24 The next Rural Development Programme for England is capable of contributing to priorities across all themes of the Strategy³. Specifically it will be used to:
 - Enhance the environment and countryside the Environmental Stewardship Scheme will remain at the heart of the next Rural Development Programme
 - Make farming, the food chain and forestry more competitive and sustainable through improving skills, knowledge transfer and innovation
 - Enhance opportunity in rural areas through increased investment in skills, and enterprise.
- 1.25 We are currently developing the framework of national priorities for the next Rural Development Programme in light of responses to the consultation published in Spring 2006. Within this national framework, the English regions will identify their own priorities for Rural Development funding. Regional Development Agencies, Natural England and the Forestry Commission will, in consultation with others including the Environment Agency and English Heritage, work up regional plans for the Programme. In doing so they will look to build on and develop existing regional strategies, such as the regional SFFS action plans.
- 1.26 Discussions on the funding for the next Rural Development Programme are underway, within Government and with the European Commission. We know that we will need to make use of the flexibility offered by voluntary modulation to fund our agri-environment commitments. On 24 May 2006 the European Commission published a draft regulation on the use of Voluntary Modulation, and we are currently negotiating this proposal to try and ensure it contains the flexibility we require to fund our rural development ambitions appropriately. In terms of cofinancing any voluntary modulation expenditure, these decisions need to be taken in the context of the Government's wider Comprehensive Spending Review and the future of the industry as a whole.
- 1.27 The final Programme will be submitted to the European Commission for approval by the end of 2006.

³ See page 6 of the consultation document, available at: www.defra.gov.uk/corporate/consult/rdp2007-13/rdpconsultdoc.pdf

1. Setting the Context

Structure of the Forward Look

- 1.28 This Forward Look is structured around **five priority themes**:
 - 1. Succeeding in the market
 - 2. Improving the environmental performance of farming
 - 3. Sustainable consumption & production
 - 4. Climate change & agriculture
 - 5. Animal health & welfare
- 1.29 Each theme is elaborated in terms of:
 - its rationale
 - the current challenges
 - our ambition for the medium term
 - the actions that need to be taken
- 1.30 Many of the actions contributing to each theme are already underway, reflecting the widely acknowledged view that the overall direction and goals of the Strategy continue to be relevant today and into the future. However, decisions on future funding of individual actions or initiatives must be seen in the context of the Government's overall review of spending, due in summer 2007.
- 1.31 The cross-cutting nature of the Strategy is one of its key strengths. While it is clear that individual policies and actions can play a significant role in delivering change on the ground, the success of the Strategy is also dependent on a number of key enabling activities, which cut across, influence and provide support for the priority themes. These include:
 - Effective delivery mechanisms and institutions
 - Communications
 - Better use of regulation and other policy levers
 - Advice, training and skills
 - Evidence, R&D and technology

Delivering the Strategy

2. Succeeding in the market

Rationale

2.1 This remains a core theme of the SFFS, flowing from the Policy Commission's recommendation to reconnect farmers with their market and strengthen the links between the numerous elements in the food chain. The key elements to achieve this remain as in the original Strategy, encouraging a move away from dependence on subsidy, and towards a more professional business-focussed approach, based on greater awareness of market opportunities, including for diversified enterprises, the benefits of collaboration and co-operation, and the acquisition of skills needed to exploit these new opportunities. A number of practical actions to assist in this major business change agenda are already well established, whilst Government plays a key role in respect of the policy framework, for example by influencing the rate of CAP reform.

"The future of farming depends on profitable production that lives within the limits of natural resources and, critically helps others to do so as well" **Rt Hon David Miliband MP, 3 July 2006.**

What is the challenge?

2.2 To drive forward the business change agenda, creating a more professional, farming industry which is responsive to market signals and seeks to exploit opportunities arising from shifts in consumer demand.

Where do we need to be heading?

- 2.3 Our ambition for the medium term is for:
 - a clear picture of the future of the CAP, following EU decisions on CAP reform in 2008 and the EU budget review in 2008-09. We would like to see the 2008 CAP review help to deliver a more profitable, internationally competitive and sustainable farming sector through:
 - full decoupling of subsidy from production;
 - more funding switched from Pillar 1 to Pillar 2 across the EU;
 - the phasing out of market price support;
 - removal of other market distortions such as production quotas and set-aside and avoidance of additional distortions such as the capping of payments to farmers;
 - measures to ensure a smooth phase out of export subsidies.
 - This would help pave the way for a manageable transition to an eventual phasing out of direct payments in line with the Government's Vision for the Common Agricultural Policy, a process which we hope will be given added momentum by the EU budget review in 2008/9.

2. Succeeding in the market

• An industry in which market-oriented farm businesses are successful, there is greater integration within the supply chain and in which collaboration and co-operation between farmers, and between farmers and the rest of the food chain are well embedded in business practice.

How will we get there?

Supporting farming and food businesses

- 2.4 Effective, targeted use of the next **Rural Development Programme for England** to build capacity within the industry in order to make farming and the food chain more competitive and sustainable, and to enhance business opportunity, including farm diversification, in rural areas.
- 2.5 Signposting farmers to the RDA managed Business Link network for their generic **business support** needs. Working with the RDAs to ensure that such services meet the needs of farmers, and raising awareness among farmers of this source of business advice through Defra media, including the Whole Farm Approach, where it will form a part of a more integrated and targeted approach to the advice provision.
- 2.6 **Restructuring the five statutory horticulture and agriculture levy boards** into one overarching levy board with subsidiary, sectoral companies, thus allowing for greater accountability to levy payers, as well as allowing for efficiencies and commonalities to be identified, in order to help the sectors involved. The new structure, announced in June 2006, which will be in place by 1 April 2008, will be more flexible and will release the sector companies from the requirements associated with being public bodies, whilst still making them accountable to levy payers (and ultimately to Ministers through the levy board). The reform of the levy boards will also include a review of the requirements of each sector and the types of activities that the sector companies should be undertaking to meet these needs. This will help sector companies to meet new and future challenges facing the agriculture industry.
- 2.7 In addition to that available under the Agriculture Development Scheme, the Government has provided a significant amount of dedicated funding to the Food Chain Centre and the Red Meat and Cereals Industry Forums. This dedicated funding was intended as a transitional measure to help the industry adapt to a more market-orientated future. Before it comes to an end over the next two years we will be taking stock of the work of these bodies, and of English Farming and Food Partnerships, which benefits too from significant Government funding. We will review with them what needs to be done, and the structures that need to be in place, to ensure that the industry takes action to benefit from the tools and techniques that have been developed and from working together more collaboratively. In that context, we will also review the level and direction of funding under the Agriculture Development Scheme. The scheme has played an important role in backing the work of bodies like the Food Chain Centre and English Farming and Food Partnerships involved in the delivery of elements of the SFFS, as well as supporting a range of other projects aimed at improving competitiveness through better marketing. We want to ensure that Exchequer funding of the food chain, including through ADS, is directed to achieve SFFS priorities over the next three years.

"The best way for a small farm business to get the benefits of a large farm business is to collaborate with others" **Policy Commission on the Future of Farming and Food, January 2002**

- 2.8 Implementation of the **Non-Food Crops Strategy**⁴, which aims to drive forward the bio-based economy through research, dissemination of technology and knowledge, and building supply chains from agriculture to industry. A 2 year progress report on the 50 actions contained in the strategy is due in November 2006, and most of these actions will be completed by 2009.
- 2.9 Sponsoring the work of the **National Non-Food Crops Centre**, to provide a single authoritative source of information on the use and implementation of non food—crop products and technologies. Their primary function is to derive, maintain and disseminate data on the non-food uses of crops and to help turn ideas into successful products and supply chains in support of actions in the Non-Food Crops Strategy.
- 2.10 Working with **Assured Food Standards** (AFS) and other stakeholders to facilitate closer integration of Assured British Meat and Assured British Pigs into the **Red Tractor** scheme and the continuing upgrading and **rationalisation** of the standards underpinning the Red Tractor logo. Exploring with AFS and other interested parties opportunities for promoting the Red Tractor logo in order to reconnect consumers with quality British produce, and thus make it more useful for consumers and producers alike.
- 2.11 Supporting the **quality regional food** sector through a five year £5 million programme of support (beginning in 2003/04). Activity under this programme is focused on three key areas trade development, consumer awareness and business competitiveness with the specific objective of creating a flourishing high quality regional food sector. The programme is being delivered by Food from Britain, working closely with the RDAs and Regional Food Groups. Initiatives which FFB have taken forward include: meet the buyer events with retailers and the food service sector; producing a guide to distribution; and helping to raise the profile of Britain as a food destination to tourists. The 2012 Olympics is an opportunity to create increased interest in quality local and regional food as well as other food issues, and this is being taken forward as part of the London Food Strategy and wider Defra objectives for a sustainable Olympics.
- 2.12 Actively encouraging producers to take advantage of the **EU protected food names scheme**. The scheme provides a means for farmers to add value to their produce and market it in a more imaginative way, particularly given consumers' growing interest in food with a clear regional provenance. Promotion of the scheme forms part of our wider strategy of support for the quality regional food sector.
- 2.13 **Promoting the export of food and drink** produced in the UK. With financial support (5.4 million in 2006/07) from Government, Food from Britain promotes exports of processed food and drink and offers tailored assistance to small producers new to or inexperienced in exporting.

⁴ www.defra.gov.uk/farm/acu/nonfood/nonfood.htm

2. Succeeding in the market

- 2.14 Working with stakeholders to progress the **Action Plan to develop organic food and farming in England** published in July 2002⁵ and its follow up report published in 2004⁶, which aims to create a sustainable and competitive organic farming and food sector. We propose that the Organic Action Plan Stakeholder Group should continue, in order to provide strategic advice on developing the organic sector, and that it should be more closely aligned with the governance arrangements for the SFFS (including the new Delivery Group). The main target of the Plan is to help domestic producers meet more of the increasing UK demand for organic food and specifically that by 2010 the share of the UK market for indigenous organic food supplied by home producers will have increased to 70%.
- 2.15 The FSA will be pressing in the forthcoming EU review of food labelling for **country of origin information** to be extended to a wider range of foods.
- 2.16 Follow up on recommendations that the **Competition Commission** may make to government as regards the supply chain and relationships within it following the Commission's investigation of the grocery market.

There is no doubt that if farmers are to be equitably rewarded for what they produce for the market, the concept of fair trade has to start at home. Corporate responsibility needs to be borne by every link in the food chain, and seen to be." **Rt Hon David Miliband MP, 3 July 2006.**

2.17 Support for farmers to take advantage of **financial risk management products** to enable them to be more resilient to increased price volatility, and to increase uptake of the business benchmarking software that is available through the Whole Farm Approach.

The Policy framework

- 2.18 The **policy landscape** has changed considerably since 2002, and continues to shift through implementation of the 2003 CAP reforms, reform of the EU sugar regime, progress in global trade liberalisation through the WTO DDA agenda, and preparation for the 2008 EU budget review. In the international arena, Government continues to press hard for outcomes that will secure a sustainable future for our farming and food industries.
- 2.19 The implementation of the **2003 CAP reforms** remains the key enabler for driving forward the business change agenda in the medium-term, and bringing a more market-oriented focus to farm businesses. In particular the decoupling of direct payments from production allows farmers to re-assess what they do in order to maximise their farm's returns from their own skills and resources, thus leading to a more secure and viable business future. Unfortunately, that message has been obscured by the significant short-term problems in delivering the Single Payment to farmers. We are determined that the right lessons are learned from that experience, first to prepare for the undoubted challenges that will exist in the delivery of the 2006 scheme, and second to move to a more stable position for the 2007 scheme year. RPA and Defra will work closely with industry stakeholders to that end.

⁵ www.defra.gov.uk/farm/organic/policy/actionplan/actionplan.htm

⁶ www.defra.gov.uk/farm/organic/policy/actionplan/pdf/actionplan2year.pdf

- 2.20 **Further CAP reform** remains an important goal: the 2003 reforms have already been built upon, with the successful conclusion of reform in the sugar sector. But these are only the early stages of a process which, as outlined in the Government's Vision for the CAP⁷, will lead to a European agricultural sector which is fully competitive, environmentally sustainable and able to thrive profitably in a liberalised, global economy without damaging developing countries. In line with the recommendations of the Policy Commission⁸ the Vision calls for an end to market price support and direct payments over a 10 to 15 year time horizon. 2008 is a key milestone with a review of decoupling and other elements of the CAP scheduled. We are working for further steps to ensure the CAP is less distorting, delivers a sustainable, profitable and competitive farm sector and represents much better value for EU taxpayers and consumers.
- 2.21 At a global level, the momentum for greater **liberalisation of trade**, and removal of distortions, continues to build including in agriculture. The successful conclusion to the WTO DDA round is crucial if developed as well as developing economies are to benefit from the opportunities provided by increased trade. The aim is to conclude a DDA Round this year, in which case, on past precedent, we can expect the impacts to occur largely between 2007/8 and 2013 and we would expect export subsidies to be phased out by 2013 with a substantial part to be eliminated by around 2010.
- 2.22 In the overall context of a shift to a more open trading environment, and with potential impacts of climate change, the issue of the nation's **food security** is increasingly a topic of debate. This debate is often widened to include, for example, environmental impacts of food production both at home and abroad. The Government is examining this issue further, and Defra will publish the results of its own analysis in autumn 2006.
- 2.23 This important debate is closely linked to the wider issue of **sustainable land use**, and in particular how we utilise our agricultural land. The interim report of the **Barker Review** of the planning system and productivity in England raises questions about restrictions on land use, including land used for agriculture, and their impact on the availability and cost of land for other economic activity. This gives rise to wider questions about what we will need land for in the long term, and how we will use it, against the backdrop of climate change, social and demographic change and increasing competition for space for development. These are legitimate and important questions, which go beyond the scope of this Forward Look, and will need further detailed consideration. As a starting point, Defra will be engaging with the Barker team on these issues as they complete their inquiries and publish a final report before the end of 2006.

⁷ www.defra.gov.uk/farm/capreform/pdf/vision-for-cap.pdf

⁸ Policy Commission on the Future of Farming and Food, page 23, http://archive.cabinetoffice.gov.uk/farming/pdf/PC%20Report2.pdf

3. Improving the environmental performance of farming

Rationale

- 3.1 With farmers managing around 70% of the land in England, the importance of farming practices on the environment our landscape, our wildlife and biodiversity, the quality of our soils, air and water cannot be over-estimated. Undoubtedly there has been real progress to date in building environmental responsibility into mainstream farming practices. Environment Agency data shows a significant fall in pollution incidents from farming over the last decade. However, there remain important issues to be addressed in terms of environmental protection and pollution control.
- 3.2 The challenge, in a sector that is made up of around nearly 200,000 farm holdings, of which around 130,000 are significant in business terms, is not simply to improve farming's environmental performance, but to do so in a way that maintains or improves economic competitiveness, using all of the policy tools available to us: developing the right mix of incentives, targeted regulation, voluntary action, and advice and training. A range of key actions, outlined below, are being undertaken by Government to support the integration of environmental performance with economic sustainability.

What is the challenge?

3.3 Creating sustainable farm businesses in which continuously improving environmental performance is integral to the economic success of the business, rather than working against it. Farming needs to have as a key priority the sustainable management of all the natural resources with which it interacts – landscape, water, soil, air, energy, waste as well as ecosystems in general and the biodiversity they support: **making a net positive contribution to the environment over time**. The principles of polluter pays, resource user pays and using public payments to secure public goods that would not otherwise be provided, underpin the Government's policy in this area.

Where do we need to be heading?

- 3.4 Our ambition for the medium term is for:
 - Strengthening of pillar 2 within the CAP following the 2008 mid-term review.
 - Environmental Cross-compliance conditions as the "floor" of farming practice.
 - Standards firmly embedded and demonstrated by higher compliance rates with farmers reducing their environmental footprint and further enhancing animal health and welfare.
 - A more outcome focussed approach that empowers farmers and permits some reduction in the number of explicit standards within cross-compliance.
 - The Farm Advisory System introduced, to continue to assist farmers to improve their environmental performance.

- The majority of English farmland delivering public benefits, and being rewarded for its contribution under agri-environment schemes.
- A farming industry that understands and acts on its impact on the environment, particularly in respect of water quality and soil management.
- Providing standards for individual farming sectors to benchmark their environmental performance.
- Sustainable farming contributing to UK Biodiversity Action Plan (BAP) targets, and England Biodiversity Strategy objectives, including:
 - Declines in populations of farmland birds reversed
 - Increased proportion of farmland SSSI in favourable condition
 - Declines in BAP priority species and habitats halted and reversed
 - Declines in plant diversity in fields and field margins reversed
 - Losses of farmland features of value for wildlife halted and all positively managed

How will we get there?

Sustainable land management

- 3.5 A base level of environmental, public, plant and animal health and welfare standards for all farms will be delivered through the use of the **cross-compliance** conditions attached to receipt of the Single Payment. Over time this will move towards a more outcome focussed approach that empowers farmers to make the 'right' management decisions and permit some reduction in explicit standards. A successful adoption of Soil Protection Reviews (SPRs) in autumn 2006 will allow GAEC soil standards to have been subsumed within SPRs (See also paragraph 3.18 on the Soil Action Plan).
- 3.6 The key policy tool to delivering a more environmentally responsible farming industry will remain **Environmental Stewardship** (ES). Using public money to pay for public goods, it will remain at the forefront of the new Rural Development Programme for England from 2007. In its first year of operation there has been significant progress: by 1 July 2006 over 22,000 had joined the Entry Level Scheme (ELS) and, with the existing agri-environment schemes, there are now over 4 million hectares of farmland under some form of funded environmental management in England. In addition the scheme supports the delivery of environmental benefits in the organic farming sector, through Organic Entry Level Stewardship. Work is ongoing to monitor and evaluate the environmental effectiveness of ES, with a progress review planned for 2007/8.

3. Improving the environmental performance of farming

3.7 The **uplands** are predominantly shaped by agricultural activity and are highly valued for their biodiversity, recreation, landscape and archaeological features. Defra's consultation on a new upland reward structure proposed that rewards for upland farmers and land managers should move away from a compensatory payment toward a system that rewards them for providing and maintaining public benefits. The existing Hill Farming Allowance will however continue for 2007. On agriculturally important commons in the uplands, we will use new powers in the Commons Act 2006 to enable local Commons Councils to be established. These will ensure better management of agriculture, vegetation or rights of common on these commons.

"We know from public attitude surveys that the rural environment is valued by a high proportion of the population. Most respondents say they would support paying farmers to regenerate threatened landscapes or habitats. Investing in the quality of the rural environment can attract tourism, contribute to the quality of life for rural communities, and can help pay for traditional forms of land management, which are often labour intensive, helping keep traditional skills alive" **Strategy for Sustainable Farming and Food, December 2002**

- 3.8 **Upland** areas also have a key role and function in the water cycle, which needs to be viewed within an overall framework of the integrated management of soil, air and water. Sustainable land management in the uplands has a key role to play in both adapting to and mitigating the effects of climate change as well as the provision of wider public benefits.
- 3.9 The **Whole Farm Approach** already assists in improving environmental performance for farmers. Self assessment modules currently available include cross compliance, environmental management systems for farmers, waste management, crop protection management and the soil action plan. The objective is to create an integrated package that provides the opportunity for farmers to relate regulatory requirements across the spectrum of their interests.

Water, soil, & air

3.10 We are developing a more **strategic approach to natural environment policy** – by which we mean our policies on air, water, land (including soil) and biodiversity. Our aim is to move towards a more integrated policy framework, based on the conservation and enhancement of entire ecosystems. This is a long-term agenda which will involve further developing and applying expertise on environmental limits and valuation, and is intended to deliver a wide range of benefits such as better identification of cumulative pressures and improved prioritisation. In the longer-term, this will help to inform wider decision-making across Government in the context of sustainable development.

Water

3.11 The impact of farming on water quality and water quantity remains a challenging area. In particular, meeting the requirements of the EU's Water Framework Directive will require positive action from the farming industry. The recently launched **England Catchment Sensitive**Farming Delivery Initiative is promoting early voluntary responsible practices within the

farming community in conjunction with Environmental Stewardship e.g. in respect of better soil, nutrient and livestock management and crop protection in forty priority catchments. However, the present policy mix is unlikely to be sufficient to meet our obligations, in all catchments at risk from diffuse water pollution from agriculture. Work therefore continues to assess the cost-effectiveness of all available policy options for tackling diffuse pollution from agriculture. Analysis covers, amongst others, use of different types of regulatory tools (national and targeted) as well as advice and supportive policy approaches. Based on the outputs of the analysis, Defra will be consulting in the second half of 2006 on a broader package of measures to tackle diffuse pollution from agriculture, including both supportive and other instruments.

- 3.12 The aim of these measures will be to ensure that all farming sectors contribute to the objectives of the **Water Framework Directive**. The industry and the Environment Agency are delivering initiatives such as the **Environmental Plan for Dairy Farming** and the sheep industry **Pollution Reduction Plan**. Evidence shows that the industry-led **Voluntary Initiative** is succeeding in reducing levels of pesticides in water.
- 3.13 The **Nitrates Directive** is a basic measure under the **Water Framework Directive** and is aimed specifically at controlling nitrate pollution of water from agriculture. The Environment Agency estimates that nitrates have been steadily increasing in our ground waters for the last two decades.
- 3.14 The effectiveness of Action Programme measures applied in **nitrate vulnerable zones** is required to be reviewed every 4 years. As a basic measure under the Water Framework Directive, the review which is currently under way is being considered within the context of the Catchment Sensitive Farming programme. A consultation on revised Action Programme measures is due shortly.
- 3.15 The Environment Agency is now targeting inspections as part of their **Integrated Regulation of Agriculture Project (IRAP)** to areas and activities that pose the greatest environmental risk.
- 3.16 **An integrated approach to agriculture and environment** issues is crucial to deliver the outcome of creating a sustainable future for farming and food in this country. A shared understanding of the impacts of farming practices on the environment, and of environmental regulation and policy on farming is required by policymakers and industry alike. From the Government's perspective, we are working hard to ensure a holistic approach to environmental problems that impact on the farming sector. For example we are exploring further how we can help farmers deliver environmental objectives through **whole farm management systems**, so delivering sustainable agriculture objectives within an economically viable system. We will be assessing the appropriate tools that could help to deliver this approach.
- 3.17 **Effective nutrient management planning**, which uses the principles of Integrated Farm Management, will contribute to this balance by minimising the environmental impacts of nutrient oversupply whilst reducing unnecessary expenditure on fertilisers by farmers.

3. Improving the environmental performance of farming

Soils

3.18 The **Soil Action Plan** commits Government and partners to improving the protection and management of England's soils, to deliver a range of ecosystem services such as acting as a growing medium for our food, timber and other crops. We continue working with land managers to help refine our approach to soil policy, particularly through cross compliance and Environmental Stewardship. We have encouraged farmers to identify the risks to their soils and demonstrate how they are managing the problems identified, and we are providing incentives where we recognise farmers need to go beyond basic good management. These polices provide an effective platform for sustainably managing soils and we will be reviewing the impact of policies to date, as well as consulting during late 2006 on our future strategy on soils. There are on-going discussions in Europe for a Thematic Strategy that could include legislation for soil protection in Member States. We are active participants in these discussions but will need to consider whether other policy instruments will be required to meet our obligations.

Air

- 3.19 **Ammonia** is rapidly becoming the main driver for the impacts of air pollution on natural and semi-natural ecosystems, through acidification and eutrophication. 85% of ammonia in the UK comes from agriculture, with the dairy sector accounting for the largest proportion of this. Defra will be developing a strategic approach to reducing ammonia emissions, in collaboration with its partners across Government, in industry and NGOs. Where possible this will utilise existing schemes and initiatives to help deliver the UK's statutory targets for total ammonia emissions for 2010 and beyond.⁹
- 3.20 The Government needs to implement by October 2007 the requirements of the directive concerning **integrated pollution prevention and control (IPPC)**, which encompasses large installations for the intensive rearing of pigs and of poultry. Those installations require permits containing emission limits and other operating requirements to deal with ammonia and other pollutants. The Government has been encouraging representatives of the sectors to work with the Environment Agency in developing an approach which minimises the burdens of meeting these requirements. Since the requirements also address energy efficiency and waste minimisation, there are opportunities for operators to make costs savings as well as enhancing their environmental performance.
- 3.21 **IPPC** also encompasses large food production installations. Here again, the Environment Agency and representatives of the sector have worked together to clarify and apply requirements, with the same form of benefits achieved.

The National Emissions Ceilings Directive (2001/81/EC) contains mandatory targets for UK ammonia emissions, to be met by 2010. The Directive is currently being revised with the highly likely outcome that tighter targets for 2020 will be proposed by the European Commission.

Biodiversity

- 3.22 The UK is committed to the European Union objective of halting **biodiversity** loss, with the aim of achieving this by 2010. Biodiversity is therefore not just a key test of sustainability, but an essential component of it. The England Biodiversity Strategy *Working with the grain of nature*, was published in 2002 to bring together England's key contributions to achieving the 2010 target to halt biodiversity loss. The strategy seeks to make biodiversity part of the mainstream of our thinking and emphasises that healthy, thriving and diverse ecosystems are essential to everybody's quality of life and well-being.
- 3.23 The recently published report on progress under the UK Biodiversity Action Plan between 2002 and 2005 suggests that whilst some priority species and habitats are still declining, the last three years have seen more positive signs of progress.
- 3.24 The percentage of Sites of Special Scientific Interest (SSSIs) in target condition in July 2006 is 72.7 per cent, and Defra is on track¹⁰ to achieve its PSA target of '95% of Sites of Special Scientific Interest in favourable or recovering condition by 2010'.
- 3.25 Although farmland bird populations have declined by over half since the late 1970s, the rate of decline has slowed and most recent data show that farmland bird populations appear to have stabilised and are on track to achieve Defra's PSA target to 'reverse the long-term decline in the number of farmland birds by 2020'.
- 3.26 Climate change impacts pose an increasing challenge to meeting our objectives and commitments on biodiversity over the next 10 to 20 years. Radical changes in use and management of our land, water bodies and seas in response to climate change are likely to be as significant as the northward and up-mountain shifts in range, rising sea levels, increasing frequency of extreme events and acidification of the oceans. Under the England Biodiversity Strategy we have established a Climate Change Adaptation workstream to provide better guidance on impacts of climate change, identify research needs and promote adaptation of policies and programmes within the strategy.

¹⁰ The trajectory for the SSSI PSA Target can be found in Defra's Departmental Annual Report www.defra.gov.uk/corporate/deprep/default.htm

4. Sustainable Consumption and Production

Rationale

- 4.1 Environmental impacts occur throughout the food chain, not just in farming. Taking account of impacts throughout the lifecycle of food products and considering impacts outside the UK is important in addressing the overall impacts of food consumption and production. The Sustainable Farming and Food Strategy reinforced by the recently published Food Industry Sustainability Strategy provide a starting point for consideration of the role of the food and farming industries, and consumers in delivering the wider goal of sustainable consumption and production (SCP).
- 4.2 A key focus of the SCP concept is on breaking the link between economic growth and negative environmental impacts. It means "getting more from less" in recognition that there are absolute limits on the Earth's capacity to absorb pollution and provide natural resources. Achieving this requires a major shift towards products and services which reduce environmental impacts, cleaner more efficient production processes which strengthen competitiveness, and shifts in consumption towards goods and services with lower impacts. The UK Government's approach aims to harness a variety of mechanisms, including agreements with manufacturers and retailers, Government procurement, better labelling for consumers and regulation where necessary to achieve these goals.
- 4.3 SCP policy looks at issues through a product and lifecycle lens and considers the impacts which may be "hidden" in complex product supply chains. Evidence suggests that environmental impacts from food production and consumption are significant, perhaps up to 30% of overall household impacts. Within the food and drink category, impacts from meat and dairy products far outweigh those from fruit, vegetables and cereals. From a lifecycle perspective, inputs to primary production of meat and dairy products such as energy use in chemical fertiliser production, its application in feed production, and other inputs such as production of machinery, dominate lifecycle impacts and frequently outweigh those from later transportation and processing. Since significant impacts occur at primary production stage, any wastage of food product at later stages in the lifecycle will reduce overall resource efficiency.
- 4.4 The theme of "Improving the environmental performance of farming" deals largely with measures to promote the positive and limit the negative environmental impacts of production in English farming. SCP looks at impacts across the whole production, supply and consumption chain. In respect of farming this will include more re-cycling of organic manures, less use of artificial fertilizers, and bio-pesticide control. While for the food chain more widely, it includes impacts in food manufacture and distribution, and, since a significant amount of food consumed in the UK is imported, currently around 36%, it is also necessary to consider how the UK food chain contributes to environmental impacts abroad.
- 4.5 As mentioned in paragraph 1.12, the food manufacturing, retail and food service sectors are a major component of the economy and have an important contribution to make to SCP. The food industry accounts for 14% of energy consumption by UK businesses, 10% of all industrial use of the public water supply, and 10% of the industrial and commercial waste stream; as well as 25% of all HGV vehicle kilometres in the UK. Work by the food industry to reduce impacts

- and waste within their supply chains, including from transportation and processing, and consideration of the range of products they offer to consumers will all be essential to progress on reducing overall impacts of UK food consumption
- 4.6 There are consumer trends that could work to the advantage of sustainable food and farming, including the premium paid for fresh food in out-of-home purchases, celebrity chefs and the re-emergence of a food culture within the UK, the rapid rise in interest in seasonal food, in animal welfare and the continued growth of demand for organic products. There is a need to expand the range of issues considered by industry and consumers under the banner "sustainable food" to include, for instance, the impacts of high levels of consumption of meat and dairy products, and further developing the potential linkages between sustainable food, animal welfare and a healthy diet will be important.
- 4.7 Other trends are more uncertain in terms of their effects on SCP goals. The overall significance of impacts of increasingly globalised food supply chains, and trends in consumption of prepared and convenience foods in the UK are not yet well understood, but processed products (e.g. yoghurt versus milk) with complex supply chains, storage, packaging, transportation and cooking, may produce significant environmental impacts and these remain important considerations.

What is the challenge?

4.8 To encourage production and consumption patterns of food with lower environmental impacts, which creates opportunities for less resource use, pollution and waste throughout the entire food chain, and increased competitiveness for food businesses.

Where do we need to be heading?

- 4.9 Our ambition for the medium term is for:
 - A strengthened evidence base on UK food consumption including impacts of overseas production and a better understanding of the significance of post-farm gate impacts
 - A more informed recognition of the role of local, seasonal, and organic food and farm assurance labels in delivery of sustainable food across government and industry
 - Resource efficiency embedded in farming and food industry practice and retailer decisions, particularly for high impact products
 - Increasing purchases of lower impact products (e.g. in-season produce) by consumers, driven by retailer offerings and increased awareness
 - Sustainable sourcing of food by public institutions to include clear consideration of meat and dairy impacts, reflecting their significance in the sustainable food agenda

4. Sustainable Consumption and Production

- Better linkages between public information on diet, sustainability and health
- Reduced agricultural waste production and the re-use of agricultural and non-agricultural waste providing opportunities for new businesses in rural areas, within a planning framework supports sustainable development.

How will we get there?

- 4.10 Defra's **Sustainable Consumption and Production (SCP) programme** is currently building an evidence base to enable development of a targeted approach to food and drink impacts, in support of delivery of both the wider SFFS and the Food Industry Sustainability Strategy (FISS). It is helping to identify how far the range of policies focused on UK farming, food manufacturing and retailing identified in these strategies address key lifecycle impacts and where there are gaps, for example where impacts may be "hidden" within overseas supply chains or embedded within inputs to primary production. It also puts a new focus on the efficient use of resources and minimisation of waste right across the lifecycle as a driver for reducing both costs and environmental impacts for businesses.
- 4.11 The SCP evidence base suggests a strong focus on lowering the environmental impact of inputs to primary production particularly in meat, poultry, dairy and associated feed production. It also suggests improving resource efficiency in transportation, processing, retailing and household consumption of the final products would be fruitful areas for action. Exploration of the potential for further improvements to the following are important steps in developing an SCP approach to food:
 - the energy efficiency of inorganic fertiliser production;
 - reducing use of inorganic fertiliser in the non-organic farming sector, through improved farm practices, plant or animal breeding;
 - reducing energy and water use in processing, packaging and transportation of food;
 - seeking to reduce or avoid waste food product at every stage, since this can have a very strong influence on the overall resource efficiency of food systems.
- 4.12 The SCP approach does not offer a single policy solution, and it will not be delivered by Defra's SCP Programme alone. There will be a need for a package of measures focused on producers, manufacturers, retailers and consumers, some of which are outlined below as part of this Forward Look. There are likely to be important synergies between SCP and the actions already being taken on nutrient management, support for organic farming and integrated farm management approaches, particularly in terms of reducing inputs to production. Work with food manufacturers, retailers and the development of consumer focused initiatives should also contribute to driving consideration of these issues through the supply chain.

The Food Industry

- 4.13 **The Food Industry Sustainability Strategy (FISS)** looks at sustainable food production practices beyond the farm-gate. It sets out how those involved in the food industry (manufacturers, wholesalers, retailers and food service providers) can, through widespread adoption of best practice, help achieve sustainable development. It also covers the role that Government and industry can play to inform sustainable consumer choices better and influence current patterns of consumption. A FISS action point is that, following on from the work and recommendation of Advisory Committee on Consumer Products and the Environment, Government and industry will work together to:
 - Develop a policy framework for sustainable commodities;
 - Develop and disseminate best practice on moving towards sustainable commodities for the food industry; and
 - Create a forum to share awareness of environmental issues and experience between organisations in food commodity supply chains.
- 4.14 The FISS recognises that environmental impacts arise across the whole food chain overseas as well as in the UK. The strategy's environmental ambitions are for the industry as a whole to: reduce its carbon emissions by 20% by 2010 against a 1990 baseline; reduce water use by 10-15% by 2020 and by 20-25% in the south east of England; significantly reduce the environmental and social costs of its domestic food transportation by 2012; and for the food manufacturing sector to reduce its food waste by 15-20% by 2010. Another priority action is to double the amount or percentage of food in supermarkets covered by ethical trading schemes by 2008. Champions' groups led by industry representatives, with Government, NGOs and best practice experts, will look into the actions arising from the FISS in the areas of waste, water, climate change and energy reduction, food transport and ethical trade.
- 4.15 The Champions' groups will assess the evidence base, baseline data and the feasibility of reaching proposed targets and the efforts necessary for making progress. The work of the groups will be supported by scoping studies looking at the availability and robustness of baseline data for waste generation and energy and water use by the food industry. The research will also seek to identify opportunities for various sub-sectors of the industry to reduce waste generation and energy and water use. The groups will report back to Ministers throughout 2006 and into early 2007.
- 4.16 Retailers can act as the "gatekeepers" of sustainable consumption. The National Consumer Council, for example, has recently concluded that supermarkets are now competing on health, leading to very significant gains for consumers. The Government's **Waste Resources Action Programme (WRAP)** has now established a Retailers' Initiative with major supermarket chains to explore how they might contribute to reducing biodegradable waste from households, through their supply chain relations, marketing and other consumer-facing activity. Under this initiative, WRAP is:

¹¹ National Consumer Council (2005), Healthy competition: how supermarkets can affect your chances of a healthy diet, www.ncc.org.uk/food/healthycompetition.pdf

4. Sustainable Consumption and Production

- providing technical support to retailers and their suppliers;
- conducting research on ways that primary packaging can be reduced and publishing the results; and
- funding retailer-led research, pilots and trials projects.
- 4.17 **Renewable raw materials** derived from crops can be used to make sustainable products and deliver benefits for the environment, scientific innovation, industrial competitiveness and the rural economy. Apart from renewable energy and fuels, they can be used in the manufacture of an increasing range of sustainable industrial materials such as pharmaceuticals, starch based plastics and polymers, plant based lubricants, solvents and panelling for the automotive and construction industries. The National Non-food Crops Centre (NNFCC) is driving forward innovation in the renewable material sector and is working with farmers, research institutes and industry to help bring new sustainable products to market.

Sustainable Procurement

- 4.18 The drive to serve more nutritious and appetising meals within the **public sector** a market worth £2 billion in England is putting greater emphasis on the quality of the food procured in determining value for money. This is good news for farmers with, for example, DfES's new food standards for schools requiring not less than two portions of fruit and vegetables per day per child with the serving of seasonal produce and fresh fruit identified as good practice. The new standards also require schools to replace flavoured water and carbonated soft drinks with skimmed and semi skimmed milk, pure fruit juices and low sugar milk and yoghurt drinks. They also put limits on the serving of highly processed meat products and encourage schools instead to buy meat products with high muscle meat content. Many of these changes bring a double dividend, of being more healthy for children and better for the environment.
- 4.19 Defra is helping farmers and growers under the **Public Sector Food Procurement Initiative (PSPFI)** to develop the capabilities and capacity necessary to meet the public sector's requirements by funding workshops for suppliers and projects to develop the supply side through the Government Offices for the Regions. It has also established a comprehensive PSFPI web site¹² for buyers (and suppliers) providing guidance, tools and best practice case studies to help them achieve key PSFPI objectives, including increasing the consumption of healthy and nutritious food, raising standards of production, addressing barriers to supply and reducing environmental impacts.
- 4.20 In pursuing these objectives the PSFPI is encouraging a more innovative approach to procurement by showing it is possible to achieve both sustainability and better value for the taxpayer while complying with EU law designed to ensure public procurement is fair, transparent and not used to discriminate by setting up barriers to trade. Value for money and sustainability are mutually compatible, because value for money should be based on whole life costs and sustainability means long term, economic, social and environmental well being. For example, the PSFPI is increasing opportunities for small and local producers by encouraging public bodies to

www.defra.gov.uk/farm/policy/sustain/procurement/index.htm

- specify fresh and seasonal produce and to break larger contracts into lots. This helps to increase competition and, in doing so, obtain better deals because local producers often have lower overheads such as transport costs.
- 4.21 With increased emphasis the PSFPI could play a key role in helping the public sector meet the Prime Minister's commitment for the UK to be a leader in sustainable procurement in Europe before 2009. That is, by encouraging all public bodies to embrace PSFPI objectives in their procurement of food and catering services marrying better nutrition and sustainability with the requirement to achieve value for money. Lessons that can permeate into their other procurement activities.

Consumers

- 4.22 A strong driver for more sustainable food production is the link between food and health. **The Food and Health Action Plan (FAHAP)** implemented as part of the SFFS by the Department of Health is crucial to delivering not only a better diet, but also increasing opportunities for small and local producers to compete to supply food to the public sector a key objective of the Public Sector Food Procurement Initiative (PSFPI) that was formally launched in August 2003 (see paragraph 4.19 above).
- 4.23 Published in March 2005 "Choosing a better Diet: a food and health action plan" bought together in one place the actions needed to meet all the commitments relating to food and nutrition in the "Choosing Health" White Paper.
- 4.24 FAHAP presents the action Government will take across a wide range of areas with a focus on:
 - healthy eating in a consumer society and how information can be improved, and how industry can help to enable healthier choices;
 - encouraging healthy eating behaviours in children and young people;
 - promoting opportunities for healthy eating in the communities where we live;
 - ensuring that the NHS promotes healthy eating in all aspects of its work; and
 - promoting opportunities for healthy eating in the workplace and ensuring that the public sector leads by example.
- 4.25 The Government's Sustainable Development Strategy, Securing the Future¹⁴, set in train the work of the **Sustainable Consumption Roundtable**, which reported in May 2006. This report, I Will if You Will,¹⁵ set out a framework of recommendations to make it easier for consumers to take up sustainable habits and choices, rather than expecting them to go against the grain. Defra has committed, in Securing the Future, to develop a Sustainable Consumption Action Plan in response.

¹³ www.dh.gov.uk/assetRoot/04/10/57/09/04105709.pdf

www.sustainable-development.gov.uk/publications/pdf/strategy/SecFut_complete.pdf

¹⁵ www.ncc.org.uk/responsibleconsumption/iwillifyouwill.pdf

4. Sustainable Consumption and Production

- 4.26 Development of product roadmaps, as recommended by the **Roundtable**, setting out key issues and actions needed to deliver more sustainable food production and consumption will be an important opportunity to bring together the emerging evidence base and current policy activity and consider what further action, including research, is needed.
- 4.27 **Information on 'greener living'** is being developed for the government's main citizen-facing website Directgov (www.direct.gov.uk) and will be online by the end of 2006. A new section of the site will provide information and sign-posting across a range of greener living topics, indicating what citizens can do to reduce the pressures that their lifestyles place on the environment. This information will include appropriate messages about sustainable food consumption.
- 4.28 **The Department for Education and Skills**, though their Outdoor Manifesto and Growing Schools programme and **Farming and Countryside Education (FACE)** are working to educate children about where and how their food is produced, thus leading to more discerning consumers now, through their parents, and in the future. Growing Schools aims to encourage and inspire all schools to use the 'outdoor classroom' as a context for learning across the curriculum. It focuses in particular on food, farming and the countryside, on ensuring pupils are given first hand experience of the natural world around them.
- 4.29 FACE drives forward the important agenda of helping young people learn more about food, farming and a sustainable countryside, and FACE Regional Education Co-ordinators are key to achieving this goal. Defra provided FACE with additional funding (£60k in 2006/07) to enable an expansion of that team, and take its work further, for example through:
 - promoting the work of FACE to schools;
 - linking schools with farms;
 - providing professional development opportunities for teachers; and
 - training farmers to host educational visits to their farms.
- 4.30 Accreditation under Access to Farms' Countryside Educational Visits Accreditation Scheme (CEVAS) ensures a safe and educationally worthwhile farm visit and gives peace of mind to teachers who are able to choose farms safe in the knowledge that the farmers have the right skills to give the children an interesting educational experience in a secure environment.
- 4.31 Defra actively encourages farmers who provide educational visits under the Environmental Stewardship and Countryside Stewardship Schemes to participate in the CEVAS accreditation.

Sustainable Production in Farming

- 4.32 **Water quantity** (resource) is as important to our water management as water quality. Catchment Abstraction Management Strategies (CAMS) will help target activity to conserve water resources and water resource efficiency will be embedded into regional SFFS delivery mechanisms. In East Anglia, an Environment Agency initiative with Cranfield University and the UK Irrigation Association gives advice to abstractors on water efficiency so that supplies can be conserved to benefit the water and wetland environments and farmers can benefit from savings.
- 4.33 The promotion of **resource efficiency** in farming will lead to fewer inputs per unit produced, resulting in less environmental damage, and for the producer, fewer inputs. We will be examining the benefits of a resource efficiency approach and how it can contribute to a more sustainable agriculture through using or enhancing tools such as whole farm management systems and precision farming.
- 4.34 Nutrients, such as nitrogen and phosphorus, are important farm resources. A **strategic approach to nutrient management** will contribute to maximising efficient nutrient use and minimising the environmental damage caused by oversupply. This approach will comprise a systems view of nutrient use, considering nutrient movements around and between farms and taking into account the nutritional values of organic materials such as manures, biosolids (sewage sludge) and composts when recycling these to land as well as the contributions from other inputs such as fertilisers and animal feed.
- 4.35 The EU Landfill Directive requires the UK to reduce the amount of **biodegradable waste** that goes to landfill. Much of this may be suitable for spreading on land, providing nutrients and contributing to improved soil structure. Compost and soil conditioners made from waste need to find markets in agriculture, land remediation, horticulture etc. Defra is carrying out cross-cutting work to establish the extent to which the recovery of waste to land, including agricultural land, is likely to grow. This involves looking at the geographical capacity, regulatory issues and the attitudes and needs of those who manage the land.
- 4.36 Promotion of better management and use of **farm waste**: the Government is currently in the process of developing producer responsibility regulations to increase the collection and recovery of non-packaging farm plastics. While the Regulations will place collection and recovery obligations on producers of non-packaging farm plastics, it is intended that any collection system that develops as a result of these Regulations will collect all types of plastic waste from farms, both packaging and non-packaging. The producer responsibility system that is eventually decided on will be rolled out throughout the UK.
- 4.37 The **Whole Farm Approach**'s waste module includes a mechanism for both submitting waste licence exemption notifications and developing a better awareness of waste management with particular reference to the needs of farmers.

5. Climate Change & Agriculture

Rationale

- 5.1 Agriculture and climate change interact in several important ways. First, agriculture is in the front line of a changing climate and could be seriously impacted by adverse climate effects, such as storms, or by increased pest and disease risk. The way the land is managed can contribute to reducing the likelihood of, and damage from, extreme flood events, and to halt the decline in soil carbon. Second, the farming sector currently contributes about 7% of total UK Greenhouse Gas (GHG) emissions even though it contributes less than 1% of GDP. These are mainly of non-CO₂ greenhouse gases, with agriculture accounting for 46% of methane and nearly 67% of nitrous oxide emissions in the UK in 2004. Third, farmers will have important new opportunities to grow crops novel to the UK and in providing bioenergy and other non-food crops to reduce UK carbon emissions.
- 5.2 Action to address climate change is at the heart of Government's desire to build a shared agenda with the industry and reduce its environmental footprint. Innovation within the sector and flexible policy responses by Government will together enable farmers and land managers to adapt and to seize these opportunities

What is the challenge?

- 5.3 The challenges are:
 - Reducing GHG emissions from agriculture
 - Adaptation to realities of climate change changes in growing conditions, effects on livestock, farmland wildlife and biodiversity, impact on water supplies, disease risk
 - Making the best of opportunities to reduce flooding and environmental damage from extreme weather events
 - Maximising economic opportunities by helping to reduce the UK's emissions through greater use of bioenergy and replacement of fossil fuel based products

Where do we need to be heading?

- 5.4 Our ambition for the medium term is for:
 - All farmers to be aware of the risks and opportunities of climate change.
 - Sound, quantified information being widely disseminated on the value of different land management practices in reducing greenhouse gas emissions.
 - Evidence that farmers are changing their farming practices to minimise greenhouse gas emissions.
 - Thriving biomass and biofuels markets, including biogas.
 - An increased uptake of proactive adaptation strategies in the agriculture sector.

How will we get there?

- 5.5 It is vital to highlight the challenges and opportunities of climate change for land managers and to provide leadership in developing a policy framework that will encourage practical action. The **Rural Climate Change Forum** was set up to provide a high level forum for dialogue with Government, and authoritative advice and leadership for rural stakeholders, on climate change and rural land management. The Forum advises on the development of policy on agriculture and climate change, areas where there is a need to improve the evidence base, and the implementation of the relevant land management commitments in the UK Climate Change Programme 2006.
- 5.6 The Forum will also guide the development of a communications strategy focussed on raising awareness and delivering practical information to farmers. As part of this the Government will also work closely with the NFU and Forum for the Future who made a successful joint bid in 2006 to the Climate Change Communications Initiative Challenge Fund.

Mitigation of climate change effects

- 5.7 **Greenhouse gas emissions inventory & projections**: in terms of emissions the major focus is on non-CO2 gases, with agriculture accounting for 46% of methane and nearly 67% of nitrous oxide emissions in the UK in 2004. The Government will continue to fund a programme of research assessing the contribution of land management practices to greenhouse gas emissions, in order to improve understanding and optimise farming's contribution to climate change objectives.
- 5.8 **Market mechanisms to encourage behavioural change**: To ensure real engagement by individuals and businesses, and provide a long term policy signal for the industry, The Government is committed to examining the scope and feasibility of a market-based mechanism to facilitate reductions of greenhouse gas emissions from agriculture and other land management sectors.
- 5.9 The Government will continue to ensure other policies reflect and deliver maximum benefit for climate change mitigation. For example, water quality policy seeks to maximise the efficient use of inorganic nitrogen fertiliser. Nitrogen fertiliser is also a major source of nitrous oxide, and there are a number of practical actions and technologies that farmers can use to **reduce nitrogen use and nitrous oxide emissions**, leading to more efficient use of resources and helping profitability. The Government's aim is to encourage action which will maximise the multiple benefits that can be achieved from changes in farm practice.
- 5.10 Research has been commissioned to **evaluate the current contribution of Environmental Stewardship to climate change mitigation** and suggest ways of increasing this contribution.

 This research will feed into the progress review planned for 2007/8 (see paragraph 3.6).

5. Climate Change & Agriculture

- 5.11 **Reducing methane emissions**. A major source of methane in agriculture comes from animal manure. Capturing this to provide new energy sources (biogas) can offer new opportunities for farmers to help tackle climate change. Anaerobic digestion is a widely used technology to do this and we are developing a coherent policy approach to on-farm anaerobic digestion and biogas production, supported by research and linked to the Government's action plan on biomass. We also play a leading role in the agricultural elements of the Methane to Markets International Partnership, a G8 originated initiative, including hosting a major international workshop in late 2006 to develop understanding and market opportunities both in the UK and world wide. We will support research into cost effective options to tackle livestock emissions, for example, funding the Rowett Institute to develop a feed additive that inhibits methane formation by up to 70 per cent, while also improving feed efficiency by 10 per cent.
- 5.12 There are two issues in relation to **soil carbon and climate change**: the first is maintaining what is already there; the second is understanding whether soils can accumulate more, potentially offsetting carbon emissions to the atmosphere. Evidence suggests that over the last 25 years there has been a decline in soil organic matter in agriculturally managed soils. The mechanism for this is not fully understood but a combination of land management practices, climate change and land use change is likely. Research to better understand the relative roles of these drivers on soil carbon content is being conducted. We are also identifying which soils are vulnerable to carbon loss and encouraging practices to halt this decline, e.g. erosion control, consideration of stocking densities, returning organic residues and cultivation practices integrated with other desirable farm practice changes that reduce farming's environmental footprint. The sequestration of carbon in soil requires a long-term commitment to consistent land management to be viable. We will be commissioning further research to better understand carbon losses from soils and what positive contribution land managers can make.
- 5.13 Bioenergy offers a major opportunity for farmers to enter a new and growing market and to play a part in reducing UK Greenhouse Gas emissions. The Government established the **Biomass Task Force**, led by Sir Ben Gill, with the objective of stimulating the development of biomass energy. The Task Force reported to Government in October 2005, proposing a package of 42 recommendations which addressed barriers to biomass energy and covered a wide range of topics, including biomass heat, waste for energy, information provision, public procurement, planning, fuel supply and regulatory issues. The Government's Response to the Task Force Report was published in April 2006 and included an action plan to address directly the Task Force's recommendations. Actions within the plan have individual implementation dates, the majority of which will have been met by April 2007. The successful delivery of these actions should result in the medium term in a significant increase in the amount biomass fuel and energy (both heat and power) produced and used in the UK. There is the potential to generate up to 56,000 GWh of heat per annum from available UK biomass, with associated carbon savings of around 4 million tonnes of carbon per annum.¹⁶

¹⁶ http://www.defra.gov.uk/farm/acu/energy/biomass-taskforce/btf-finalreport.pdf

5.14 The key actions being taken forward are:

- A new 5 year capital grant scheme for biomass boilers, with funding of 10 15 million over the first two years and a second round of the Bio-energy Infrastructure Scheme, with funding at, or close to the level, proposed by the Task Force (announced in the Climate Change Programme Review);
- Agreement in principle to support energy crops under the new Rural Development Programme for England to be introduced in 2007, closely integrated with bioenergy market development;
- Announcement of the Forestry Commission's new Biomass Energy Centre as a major new hub for bioenergy advice and best practice for industry and the public;
- Further measures to integrate environmental assessment in the planning of energy crop development;
- Government leadership through public procurement, including the commitment to map the potential use of biomass across the main procuring departments of the Government estate:
 - Working with Regional Development Agencies and other organisations to ensure effective, coordinated mechanisms for delivery of policy and advice;
 - Action already taken, since publication of the Biomass Task Force report, to improve the Renewables Obligation and implementation of the associated procedures;
 - Use of the planning system to stimulate renewables development, including our support for planning authorities applying a minimum percentage of renewable energy in new developments;
 - Action to address regulatory barriers identified by the Biomass Task Force and to develop standards to improve efficacy and confidence in biomass;
 - Consideration of the use of energy from waste, which is subject to conclusions from the current review of Waste Strategy and the Energy Review;
 - Support for the EU Biomass Action Plan and agreement on UK membership of the Global Bioenergy Partnership from its launch in May 2006;
 - The introduction of new Building Regulations, from April 2006, with new procedures and tougher standards which will encourage the use of Low or Zero Carbon (LZC) systems, such as biomass.

5. Climate Change & Agriculture

5.15 The Government Energy Review, *The Energy Challenge*¹⁷ published in July 2006, places very strong emphasis on further development of renewables, with biomass expected to make an important contribution, particularly as a source of distributed energy. It includes a commitment to consider potential support mechanisms for renewable heat, with publication by April 2007, and links closely to the UK Climate Change Programme 2006,¹⁸ published in March 2006.

Adaptation

- 5.16 Research by Defra and the UK Climate Impacts Programme (UKCIP) suggests that, compared with some other European countries, particularly southern ones, UK agriculture as a whole is likely to be relatively robust in the face of a changing climate. But there are particular regions and cropping systems that may be vulnerable, for example to changing patterns of precipitation and consequent water shortages, floods or heat stress, pests or diseases. Equally there will be new opportunities available in **new crops and markets** made possible by a changing climate.
- 5.17 **Awareness raising** is a key first step only 36% of farmers see climate change as a risk to their business. To improve this situation, the Government will be publishing a UK Adaptation Strategy later in 2006, which will address how all stakeholders in the farming and food sectors can play their part in addressing the risks of climate change. Adaptation, both in terms of general principles and practical actions will be a key part of the <u>communications strategy</u> (see <u>paragraph 5.6 above</u>). The Government will work closely with UKCIP, funded by Defra, to provide a range of tools to help businesses to make 'climate risk' part of their business planning processes, and to make these tools accessible and relevant to the farming sector.
- 5.18 The Government will continue to fund **research on climate change impacts** and adaptation responses for land managers and develop accessible packages of advice for farmers. Key areas for development include:
 - Identifying new plant and animal pests and diseases, as well as the potential new ranges and persistence of existing pests and diseases
 - Predicting the impact of climate change on the livestock industry and the adaptation needed
 - Assessing the impact of extreme events (droughts, extreme precipitation) on the crops and livestock sector as a whole
 - Consider the economic and trade implications of climate change. We will also consider the scope for establishing an innovation centre to lead and foster research partnerships with relevant UK farming and food interests, drawing on input from other relevant climate zones
 - Developing information on the provision of ecosystem services to aid adaptation to climate

¹⁷ www.dti.gov.uk/files/file31890.pdf

¹⁸ www.defra.gov.uk/environment/climatechange/uk/ukccp/pdf/ukccp06-all.pdf

- Long term plant breeding challenges to be addressed to adapt UK grown crops for a changing climate
- Identifying on-farm practical adaptation based on research findings.
- 5.19 The impacts on agriculture of a changing climate and the way in which it adapts will have consequences for other environmental objectives such as biodiversity, water resources and water quality. The Government will ensure that **adaptation approaches are consistent** across these areas, which will also reinforce work under the theme of "Improving the environmental performance of farming".
- 5.20 **Flood Risk management** has become increasingly important as intensive rainfall events are predicted to become more common with climate change. Joint Defra / Environment Agency research through 'Making Space for Water' looks at land-use management and the possible management of flooding on both inland rivers and for some areas in need of coastal realignment. Integrated advice to change some farming practices and some targeted incentives through Environmental Stewardship could be important delivery mechanisms for this approach to reduce the risk of flooding to people and property. There are good examples where delivery is already happening in the SCAMP and Peat-Scapes projects where Water Companies, Government agencies and farmers are working together to gain multiple benefits for the environment and economic advantages for farming.
- 5.21 In response to predicted drier summers, the Environment Agency, English Nature, RSPB and the Wildlife Trusts have started on a 50-year **project to restore and repair England's most damaged wetlands**. This will assist the return of rare and threatened species, help to reduce flooding and secure a sustainable future for wetlands in an increasingly dry climate.

Rationale

6.1 Animal health and welfare issues have an impact across all three pillars of sustainability: economic – both at the farm level where good animal health and welfare is crucial to delivering strong economic performance, and nationally through reducing the costs to the economy of a major disease outbreak; environmentally – the way animals are kept impacts on the environment and biodiversity; and socially – consumers and society require high standards of animal health and welfare. As such it remains a core element of the SFFS.

What is the challenge?

6.2 To make a lasting and continuous improvement to the health and welfare of kept animals while protecting society, the economy, and the environment from the effect of animal disease.

Where do we need to be heading?

- 6.3 Our ambition for the medium term is for:
 - A livestock industry which recognises that good animal health and welfare is essential for economic success and disease prevention, and pays its share of the costs.
 - Consumers and retailers accepting that higher standards of animal health and welfare are not cost free.
 - Farm health planning embedded in farm practices.
 - Reduced spread of bovine TB to clean areas and a sustained reduction of the disease in high incidence areas.

How will we get there?

- 6.4 The Government has set up the England Implementation Group (EIG) as an independent strategic advisory group to drive delivery of the **Animal Health and Welfare Strategy**. The EIG acts as an interface between Government, the livestock industry and the wider range of stakeholders, driving, challenging and coordinating activities and ensuring that all play their part in delivering the Strategy. The EIG will have a key role to play in ensuring that all stakeholders work towards the outcomes described in the previous paragraph.
- 6.5 The Government and EIG will encourage and facilitate the livestock industry to develop **sectoral health and welfare strategies and councils**, which advance sector interests while promoting animal wellbeing. The EIG's Work Programme for 2006-07 details how the Group will help each of the sectors achieve this.
- 6.6 The Government will continue to work in partnership with key industry stakeholders and the EIG to make the use of **Farm Health Planning (FHP)** much more widespread across the main livestock sectors in England. This will enable livestock farmers to become better managers and contribute towards ensuring a more sustainable future. It will provide guidance on assessing,

monitoring and managing risks to the health and welfare of animals on farms. The Government is providing initiative funding to a number of industry projects to communicate the benefits of FHP to both livestock farmers and their advisors. Key aims for this initiative are to:

- Overcome initial barriers to more widespread use of farm health planning
- Raise awareness of farm health planning and farm health planning products through targeted communications
- Make available information, advice and products
- Deliver advice on the use of farm health planning products such as disease cost/benefit models and planning templates
- Demonstrate the benefits of farm health planning at farm level; both in terms of improvements to animal health & welfare and to the profitability of the business
- Facilitate sustainable farmer and advisor networks
- Provide training opportunities
- 6.7 By the end of 2006 the Government will consult on how it proposes to take forward **cost and responsibility sharing** in relation to animal health and welfare. This work is an important part of the long term vision for agriculture and is a key theme in the Animal Health and Welfare Strategy.

"Personal responsibility for biosecurity on the part of farmers is the starting point for any effective system of animal health and welfare; the more responsibility the better; the more responsibility the greater the gain for you individually and for the industry as a whole; and the greater the responsibility the greater the degree of influence you should have on policy-making."

Rt Hon David Miliband MP, 3 July 2006.

- 6.8 The Government and EIG will use **indicators** to measure our progress towards the elements of the Animal Health and Welfare Strategy's vision in order to identify where its attention should be focussed. The indicators will be published in September 2006.
- 6.9 The Government will deliver effectively the programme of **TB cattle surveillance and control**, dealing promptly with new disease incidents, and fully implement pre-movement testing requirements. The Government will be addressing the issue of badger control, but any decision needs the backing of scientific, practical, financial and organisational logic that has the confidence of farmers and animal welfare bodies, as a result of a shared understanding of the facts.

Rationale

7.1 A number of issues cut across all or the 5 priority themes and act as enablers to deliver behavioural change in the farming and food sectors: ensuring effective delivery mechanisms; communication; better use of regulation and policy levers; advice, training and skills; and, developing a sound evidence base, including R&D and technology transfer.

What is the challenge?

- 7.2 There are a number of key cross-cutting challenges in response to the above issues:
 - Shared ownership of SFFS outcomes by delivery partners
 - Effective communication of key SFFS messages to farmers and consumers
 - Better use of regulation and other policy levers including financial instruments
 - Effective use of advice and promotion of training and skills required to succeed in a market driven environment

Where do we need to be heading?

- 7.3 Our ambition for the medium term is for:
 - Delivery partners work to deliver SFFS outcomes
 - Widespread support within the farming and food industries of a shared vision for future direction of those sectors
 - Reduced burden of bureaucracy on farmers, coupled with acceptance that properly targeted regulation and enforcement is necessary
 - Increased take-up of training and skills by farmers
 - Streamlined, effective and integrated advice services

How will we get there?

Effective Delivery Mechanisms and Institutions

SFFS Governance

7.4 Until April 2006 the delivery of the SFFS was overseen by an independent Implementation Group¹⁹ chaired by Sir Don Curry. The Group's valedictory report "The Sustainable Farming and Food Strategy three years on: reflections on progress by the SFFS Implementation Group" is being published alongside this Forward Look. The SFFS external governance arrangements now consist of a small Delivery Group²⁰, chaired by Sir Don Curry and a high level Leadership Group, co-chaired by Sir Don and Lord Rooker, Minister for Sustainable Farming and Food. The aim is to enable the Delivery Group to work with Government officials and delivery partners, tackling barriers to progress and providing an early steer during policy development, whilst the Leadership Group will act as ambassadors for the Strategy within the farming and food sectors, as well as providing high-level challenge to Government.

Regional Delivery

7.5 The SFFS regional governance arrangements differ from region to region. Following the launch of SFFS in 2002 the Government Offices and the Regional Development Agencies were charged with developing regional delivery plans, which identified priorities for action. These were developed in partnership with a wide range of regional partners, from both the public and private sector. Each of the regions have established steering groups, with a number also having individual theme groups that are responsible for developing and taking forward specific areas of activity. These groups are now chaired mainly by an independent person, whose role is to ensure effective delivery of the Strategy, challenge regional and sub-regional partners and provide an effective governance framework.

Working with Delivery Partners

- 7.6 The cross-cutting nature of the SFFS means that its successful delivery hinges on effective partnership working. Although the central players are of course the farming and food industries (including industry bodies such as English Farming and Food Partnership and the Levy Boards), and central and regional government, there are also crucial roles to be played by others including local authorities, local strategic partnerships and the third sector.
- 7.7 **Natural England**, a new and independent Public Body, to be created in October 2006, will engage with the full range of issues that affect the natural environment to help determine what our environmental future will look like. It will engage with the big economic and social issues of the day to show how a healthy natural environment is part of the solution. It will also play a lead role in helping people to learn more about, and take action for the natural environment.

¹⁹ Members of the Implementation Group: Sir Don Curry (Chair), Richard MacDonald, Graham Wynne, Rosemary Radcliffe, Jeremy Pope, Ed Mayo, Christine Tacon, Dame Yve Buckland, Kevin Hawkins, Sylvia Jay

²⁰ Members of the Delivery Group: Sir Don Curry (Chair), Richard MacDonald, Graham Wynne. Rosemary Radcliffe, Ed Mayo, Melanie Leech

- 7.8 To achieve its purpose Natural England will:
 - support individuals, organisations including third sector organisations, farmers and business to take action to conserve and enhance the natural environment.
 - increase the opportunities available for people to make the natural environment an enriching part of their every day lives.
 - develop and promote sustainable solutions to environmental problems and as a result increase the social and economic value provided by the natural environment.
 - bring together organisations and individuals that influence and shape our environmental future, to achieve long term conservation and enhancement of the natural environment.
- 7.9 This work will be complementary to that of the **Environment Agency**, which has the lead role in the integrated protection and enhancement of natural resources (air, land and water); the management of waste; management of flood risk; water-based recreation, fisheries and navigation. The Environment Agency will work to encourage land managers to reduce diffuse pollution (soil, nutrients, pesticides and bacteria) from agriculture and inappropriate land management practice in the catchments most at risk from diffuse pollution. In addition it will target its regulatory efforts in an integrated inspection programme to make the most efficient use of its resources whilst imposing the least burden on farmers who pose least risk to the environment.
- 7.10 The **RDA** Tasking Framework, which came into effect in April 2005, requires RDAs to contribute to delivery of three Defra PSA targets (sustainable development, rural productivity and access to services, and sustainable farming and food). How RDAs intend to contribute to delivery of these targets, and the objectives in Regional Economic Strategies, is set out in their individual Corporate Plans 2005-2008.
- 7.11 These new arrangements have meant considerable changes for how Defra delivers its rural objectives. As priorities and activities are determined regionally, there is greater variation between regions. However, Defra is confident that by devolving these responsibilities to the RDAs and increasing their resources, rural delivery will become more responsive to local priorities and better focussed on areas and people that need it most.
- 7.12 To improve performance management, and bring it in line with the new Tasking Framework, the Government and the RDAs have also agreed a new RDA performance monitoring framework. This will enable Government to monitor RDA progress in delivering their Corporate Plans, and through these their contributions to departments' PSA targets. A key element of the new framework is a requirement for RDAs to disaggregate their core outputs on a rural/urban basis, and by disadvantaged areas.

Local government

- 7.13 Local authorities have a wide range of duties and powers that support delivery of the SFFS. In particular, they are responsible for:
 - Local planning decisions, which can impact availability of land for agricultural and environmentally beneficial use (see paragraph 2.24 on the Barker Review of the planning system);
 - Inspections and enforcement;
 - Supporting the quality regional food sector through awareness-raising among consumers and businesses (see paragraph 2.12);
 - Contributing to the Public Sector Food Procurement Initiative through their own procurement practices (see paragraph 4.19).
- 7.14 Local authorities also lead on the negotiation of Local Area Agreements (LAAs), new three-year compacts between central government and local areas. LAAs encourage partnership working, clear definition of local priorities and local flexibility over delivery mechanisms. Guidance for Round 3 LAAs produced by the Department for Communities and Local Government includes suggested outcomes on "proportion of spend on sustainable procurement" and "the percentage of food products used being locally produced and supplied"; but local areas are also encouraged to include their own locally-specific outcomes and targets which might be more specific or far-reaching. For example, West Sussex LAA (agreed in March 2006) has an outcome to "increase tenders from small and local producers to at least 6% by value of all contracts let for food and catering by the County Council".
- 7.15 The Government's **Planning Policy Statement 7** (PPS7 Sustainable development in rural areas) says that planning has an important role in supporting and facilitating development and land uses which enable those who earn a living from, and help to maintain and manage the countryside, to continue to do so. Planning policies should provide a positive framework for facilitating sustainable development that supports traditional land-based activities and makes the most of new leisure and recreational opportunities that require a countryside location. When preparing policies for Local Development Documents and determining planning applications for development in the countryside, local planning authorities should support development that delivers diverse and sustainable farming enterprises and support other countryside-based enterprises and activities which contribute to rural economies, and/or promote recreation in and the enjoyment of the countryside.

The third sector

- 7.16 The third sector supports the delivery of SFFS in a number of ways but primarily through its work towards our objectives for biodiversity and landscape, including advice and education services, and as a key delivery partner with Natural England. The sector also supports delivery of SFFS through the direct sales sector. For example, a growing number of farmers' markets which are helping farmers to reconnect with consumers and meet the growing demand for local food are operated by third sector organisations, as are some box schemes.
- 7.17 Other third sector organisations include some farmers co-operatives and food co-operatives aiming to bring direct access and greater awareness of the health benefits of fresh fruit and vegetables to those on lower incomes.
- 7.18 They also make a social and economic contribution to the long-term sustainability of rural communities through increasing business and employment opportunities, often for those experiencing difficulties in finding employment such as those recovering from mental health problems.

Communication

- 7.19 **Effective communication to farmers, growers and consumers** is essential if the Strategy is to achieve its objectives. A comprehensive communications strategy will be developed, focusing on how communications can help deliver behavioural change against each of the five priority themes. Research will be carried out and audience segmentation developed to allow messages and communications channels to be tailored to audience groups, and annual marketing plans will be created for each part of the Strategy, plotting the delivery of communications activity through the year.
- 7.20 Communications to farmers and growers will seek to engender behaviour change to support the development of a profitable, sustainable industry. This will be through high quality guidance, advice and information that is timely, tailored, accurate and accessible.
- 7.21 Communications to the general public will seek to engender behaviour change which means the public buys with quality of life considerations (economic, social, environment) front of mind. Communications to the public will help connect consumers to the source of their food, and create a greater understanding of the work farmers do to protect and enhance the countryside.

"It is not enough to just say 'Buy British'. Consumers are more discerning than that. They want value for money; they want quality; they want assurance; and they want to feel good about buying the food they choose. That may be because it is top quality, in season, organically produced, fair trade or because it is locally sourced. These are all opportunities for producers to exploit."

Rt Hon David Miliband MP, 3 July 2006.

7.22 The impact of the communications activity will be evaluated regularly and those results used to enhance future activity.

Better use of regulation and other policy levers

- 7.23 Defra is committed to **improving the regulation of farming**, and published a strategy on this issue, Partners for Success, in November 2005²¹. The strategy sets out a new partnership approach between government and the Farming Industry, developed to improve the performance of farm regulation by making it more effective, and efficient for farmers, thus helping them to reduce costs and increase competitiveness. The Strategy offers a 10 year vision for the regulation of agriculture, and is accompanied by an Action Plan focussed on the following themes: using alternatives to regulation; better design of regulations; improving information and advice; improving skills and professionalism; and more effective enforcement. It commits the Department to streamlining and simplifying regulatory controls on farmers. Success criteria for the Strategy have been developed with stakeholders and were published on the Defra website in May 2006. They will be monitored regularly.
- 7.24 **The Whole Farm Approach (WFA)** assists by enabling the creation of a single set of core data supplemented by a range of specific targeted modules. These identify where there is a regulatory requirement and the actions necessary to fulfil that requirement, supported by targeted help and guidance. Information will be used by regulators to inform the risk selection process that enables targeted enforcement. In addition, the WFA covers the rationalisation of on-farm inspection activity and the creation of the Farm Advisory System (required from January 07, following CAP reform). Modules already exist that include questions covering cross compliance, agricultural waste and natural resource protection. Further releases are planned that include the introduction of new modules covering catchment sensitive farming. The WFA will also form an important component in the Farm Advisory System that arises through CAP reform to be in place for 1 January 2007.

Advice

- 7.25 The provision of advice by government and its agencies is sometimes fragmented and this can result in a complex and sometimes confusing picture for the end customer. Defra have established a project to ensure that **advice from Defra and its agencies to farmers and other land managers is well co-ordinated**. In time, this should result in more streamlined, integrated and accessible advice provision that is responsive to farmers' needs. This includes consultation with RDAs to ensure that appropriate linkages to the provision of business advice, for which they are responsible, are made. The project is also overseeing research into the role of advice as a tool to achieve behaviour change and this is expected to inform how future Defra advice is developed and delivered.
- 7.26 **Natural England** will apply an appropriate mix of advice, advocacy, incentives and practical action according to the challenges that the environment faces. It will take forward the advisory work formerly delivered by Defra's Rural Development Service, through targeted and specific programmes of activity including workshops and farm-based demonstrations aimed at delivering cross-compliance, conservation enhancement and catchment sensitive farming.

²¹ www.defra.gov.uk/farm/policy/regulation/charge/pdf/farm-regulation-strategy.pdf

7.27 The **Environment Agency** will ensure that our natural resources including soil, air and water and waste management are protected through a programme of targeted regulation, advice and agri-environment payments.

Training & Skills

- 7.28 Training & Skills are vital if farmers are to grasp the opportunities that decoupling will bring. In our consultation on the Rural Development Programme for England, 2007-13, we proposed that **Axis 1** should be focused on skills acquisition, knowledge transfer and innovation in the farming and food sectors.
- 7.29 Defra are working with **Lantra** to develop a business competence framework for the environmental and land-based sectors. The competence framework will provide a clear understanding of what skills an individual will require to work in particular industries and in particular jobs within those industries. It will also map out career progression more clearly and provide links to training opportunities.
- 7.30 Defra is involved in implementing the 'Sustainability to Sustained Ability' Strategy, in relation to the **pig industry sector**, and is working closely with the regional RDS offices, Lantra, BPEX, NPA and Agskills and others to move this strategy forward. Pilot training groups have been set up in the east of England. Industry will also be launching a voluntary professional register for pig producers, which would be 'owned by the NPA, and run by industry experts. Those registered are required to maintain and build on their knowledge (thus earning 'points') to remain on the register. This is an excellent example of how the industry has worked in partnership, and taken a pro-active approach to sustainability. Because the pig industry is smaller when compared to others, the whole strategy will act as a pilot for other sectors, indeed, all involved have embraced the opportunity of bringing agricultural training up to date.
- 7.31 In 2005 the **Agricultural Wages Board** introduced a new grading structure into the Agricultural Wages Order. Following the introduction of the new structure it commissioned research from Lantra into the competences and qualifications required to move from Grade 2 (Standard Worker) to Grade 3 (Lead Worker) and from Grade 3 (Lead Worker) to Grade 4 (Craft Grade); and also to establish a mechanism for employee certification (via a third party). In conjunction with NPTC it has produced a list of competences which will enable workers to move between the grades as outlined above. Lantra and NPTC are currently working on a mechanism which would recognize training and qualifications, a type of skills passport which would be transferable between employers. It is hoped that it will be available by the time the 2007 Agricultural Wages Order takes effect. This will eventually be integrated within the competence framework mentioned above.
- 7.32 Defra is supporting the **Food Chain Centre**'s work on piloting and developing business improvement tools and techniques. FCC is working with the award giving bodies like Edexcel and the agriculture colleges to embed a stronger business focus into the agriculture education curriculum.

- 7.33 In addition, the **Food Chain Centre** plans to work with the sector skills councils and other training and educational bodies to develop ways of transferring the methods that it has been piloting to farming and food businesses through short courses and other ways.
- 7.34 The Defra supported **Fresh Start** initiative aims to encourage new people into the farming industry with the appropriate skills to succeed in a market-driven environment. The "Fresh Start Academy" was launched in June 2006 in Sussex. It is a unique partnership between land based colleges and a small group of land agents and consultants. The Academy will deliver training over 12 months in varied aspects of farm business management to people keen to enter the agricultural, horticultural and forestry industries. Over the next two years it is hoped to replicate this model in other parts of the country.

Evidence, R&D and technology

- 7.35 It will be crucial to delivery of the SFFS outcomes that Government has a good understanding of how policy shifts, changes in production patterns and consumer behaviour feed through on the ground. **Social research** into and how best to change behaviours will also be important.
- 7.36 A set of **headline and core indicators** has been developed as part of the process of monitoring and evaluating the progress of the SFFS. The indicators record both current state and trends in a range of key areas that the Strategy aims to influence and in doing so will measure change and progress towards the original strategic outcomes (see box under paragraph 1.6). Greater use of the indicators and a more widely shared understanding of their implications will be an important element of the further development of the SFFS.
- 7.37 The indicators have been selected for being relevant, easy to understand and transparent. Although each indicator relates to an individual aspect of sustainable development, they should be considered collectively in order to measure progress in the three pillars of sustainable development: economic; environmental and social, as well as to highlight any tensions or trade offs between them. The indicators are being published alongside this Forward Look at http://statistics.defra.gov.uk/esg/indicators
- 7.38 Supporting economic and statistical analyses are also being published alongside this Forward Look (http://statistics.defra.gov.uk/esg/sffs.asp) updating those published when the original Strategy was launched in 2002.
- 7.39 Work is already underway to track changes at the farm level in response to the 2003 CAP reforms. The **Agriculture and Environment Observatory Programme** is key to this. The Observatory monitors, and where possible anticipates, changes in agriculture as a whole and at individual farm level arising from CAP reform and other key drivers. It assesses the consequent implications for the environment. This work has important benefits for policy development in a range of related agricultural policy areas, such as diffuse water pollution, climate change and biodiversity.

- 7.40 The SFFS **Research Priorities Group** reported in 2005, setting out the priorities for research in the sustainable farming and food area. These recommendations have been considered within the context of refocusing the research programmes to meet Defra's wider strategic objectives. Four new cross-cutting programmes have been put in place as follows:
 - **Agriculture and Climate Change**: prediction, adaptation and mitigation of climate change in farming and food; air quality; greenhouse gas emissions from agriculture; energy use and efficiency in primary production and the food chain; non-food crops.
 - Water Quality and Use (Agriculture): water use efficiency and quality, including impacts of manures, nutrients and other pollutants, the Water Framework Directive, and bathing water quality.
 - Food Chain Meeting Consumer Needs: quality foods for healthy eating; waste reduction and recycling in primary production and the food chain.
 - **Sustainable Farming Systems and Biodiversity**: integrated farming systems and organic farming, soil health and biodiversity.

In addition, there is a continuing programme on:

- Plant Health (including Bee Health): Exclusion of quarantine pests and diseases; eradication and containment of pests and diseases; trade facilitation; development of plant and bee health policy.
- 7.41 The above represents a major shift from previous research programmes which were organised by commodity sector to ones which are driven by wider Defra objectives that impact on the farming and food industries and where they can help deliver solutions but without losing sight of the need for economic viability. Existing programmes will be wound down as the projects within them come to an end There is £8.9M for work in the new programmes in 06/07 from a total budget of £34M. Around a third of the research budget is turned over annually, so we expect the majority of the programme to be realigned to the new priorities by the 09/10 financial year.
- 7.42 Existing LINK programmes, which are sector facing and joint funded with industry, will continue. Defra supports a number of LINK programmes including Sustainable Livestock Production, Sustainable Arable, Horticulture, Advanced Food Manufacturing, Food Quality and Innovation and Renewable Materials. These provide important routes for knowledge transfer and innovation.

Published by the Department for Environment, Food and Rural Affairs. © Crown Copyright 2006.

Printed on material that contains a minimum of 100% recycled fibre for uncoated paper and 75% recycled fibre for coated paper.

www.defra.gov.uk

PBxxxxx

