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Green, healthy and fair

A review of the government's role in supporting sustainable supermarket food



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#### **Foreword**

This report is published at a time of many fundamental questions about food. What is grown, where and how? How should food be processed and marketed? Are current systems of shopping sustainable? What is a fair price? What are the true social and environmental costs? Such questions echo throughout the food system about farming, fishing, processing, retailing, logistics, catering and all their inputs.

A debate on these issues is rightly running, not least among supermarkets who realise that their power brings responsibility and exposure. This report is about how government relates to the supermarkets as gate-keepers of the food system.

The report draws on insights and analyses presented to the SDC in the course of our review. There is wide agreement that the tasks ahead require serious action. The supermarkets and stakeholders in our research agree that what is required is a clearer 'direction of travel'. That's why this report makes the case for a policy framework and a vision which joins up the single issues and which addresses, rather than sidesteps, the points of tension.

The case for change is strong. 'Old' policy issues such as food security, planning, fishing, farming and health now jostle for attention alongside 'newer' issues such as carbon and climate change, cardependency, consumer labelling, fair trade and localism. Issues which used to be seen as single issues are gradually being recognised as elements of an entire sustainable development jigsaw, requiring different directions for the food system.

These issues have to be addressed, without recourse to bland rhetoric such as 'consumer choice' or 'letting markets decide'. The challenge is to ensure that sustainable development emerges from those and other processes.

As the report shows, government is not nearly as hands-off in this respect as either it or others might sometimes think. There are many existing points of engagement between government and retailers. The SDC's point is that everyone wants that engagement to be optimised. In parts, the engagement is under-performing, elsewhere it is performing well and improving – not least due

to realisation that an updated overview of food policy has long been needed. The SDC senses a new willingness within government, including the devolved administrations, to clarify and refine what its role to enable a sustainable food system can be. The SDC looks forward to the Cabinet Office review helping fill that gap. This report is a contribution to that process.

A long view is appropriate. For 60 years since the 1947 Agriculture Act, the overarching tenet of UK food policy has been to ensure that enough food is available, affordable and accessible. Today in the era of climate change, oil dependency, looming global water shortage, fish-stock crises, biodiversity and public health challenges, to aim purely for quantity of supply or cheapness at all costs would be hopelessly inadequate.

Government or supermarkets alone cannot resolve the challenges of climate change or obesity. As the SDC argued in *I will if you will,* the report of the Sustainable Consumption Roundtable, only concerted action from government, business and people in tandem will achieve a radical shift towards more sustainable lifestyles. This report addresses government's role towards supermarkets within this 'triangle of change', to shift how food is produced, distributed and consumed.

We very much hope there is widespread discussion and uptake of the ideas and recommendations contained here. Finally, I offer sincere thanks to the many people who helped in this process as advisors, stakeholders, reviewers and interested bodies. We are most grateful to them. Responsibility for the report remains, of course, with the SDC.

#### **Professor Tim Lang**

SDC Commissioner for Land Use and Natural Resources

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## 1 Executive summary

Supermarket food is inextricably linked to many of the toughest challenges faced by Britain today – from obesity and climate change to waste and global poverty. The food chain contributes around one-fifth of total UK greenhouse gas emissions¹ and is a major source of waste, much of it avoidable. Obesity and overweight currently costs the economy a staggering £10 billion a year and is forecast to reach £50 billion by 2050.² Many peoples' livelihoods in rural communities, in the UK and in the developing world, depend upon getting access to, and a fair price from, the UK's food system.

The UK government and devolved administrations have a clear public mandate to tackle these challenges but cannot deliver solutions alone. Government needs to work in partnership with business and people, catalysing action within this 'triangle of change'. As gatekeepers of the food system, supermarkets are in a powerful position to create a greener, healthier, fairer food system through their influence on supply chains, consumer behaviour and their own operations. Major UK food retailers are making encouraging commitments towards greater sustainability, but we conclude there is more potential for food retail to lever positive change.

As part of this review, we asked retailers for their reflections on what actions national governments could take to better support efforts to improve sustainability through the food supply chain. Retailers perceived the absence of an overarching sustainable food strategy, or vision, from government to be a key barrier to their efforts to improve sustainability. We found supermarkets, the public and other stakeholders all asking for greater government leadership, and we conclude that there is a growing willingness to address sustainability, by retailers, the food chain and consumers.

We are aware of tensions within government towards supermarket food policy and political reluctance to be seen to be interfering in the free market. Yet, in practice we found government – and its various departments, agencies, regulators and delivery bodies – already engaged with an array of policies, initiatives and regulations that aim to influence the food system and supermarkets. In central government alone our mapping exercise identified nineteen Whitehall departments covering almost one hundred policy areas and responsibilities, from animal welfare to congestion charging, planning to diet and nutrition.

The purpose of this review is therefore not to ask

whether government should use policy interventions to influence supermarkets and the food system, but how effective these interventions are in achieving government's own aims.

The assessment draws on SDC's own analysis and policy mapping exercise. We also commissioned independent qualitative research to get the views of both the supermarkets and their stakeholders, and convened a workshop to develop thinking towards a vision for a sustainable food system.

We review government and retailer initiatives towards a sustainable food system and focus on six priority policy areas – climate change, waste, water, ecosystems, nutrition and obesity, and supply chain relationships. We make specific recommendations under each section on how government departments can better enable retailers to deliver progress.

We also identify key leadership roles for government to:

- Create a vision for a sustainable food system
- Continue to build the evidence base
- Catalyse change by using the range of policy tools at government's disposal.

We also recommend an approach which is gaining currency – roadmapping for sustainability – to support delivery of these goals.

The recommendations in this report primarily focus on UK and English government policy. During the course of the review there have been changes of government in Wales and Scotland, and the return of devolved government in Northern Ireland. A number of policy opportunities in the devolved administrations are developing, including a Farming Strategy in Wales and a National Food Policy in Scotland. We present emerging recommendations for Wales and Scotland to consider in forthcoming strategies and offer the report as the first step in a process of engagement with all the devolved administrations.

## Leadership roles for government

#### Creating a vision, and developing a roadmap for a sustainable food system

Government leadership in delivering an ambitious vision for a sustainable food system would help to define long and short term goals. The vision would need to be backed by strong political leadership and ownership, and be comprehensive, covering the economic, social and environmental aspects and global impacts of the UK food supply system. The vision will need to provide the consistent narrative for a sustainable food system, to be applied across government departments.

Developing the vision is just one part of the roadmapping approach, and this process will

require cross-departmental collaboration, and coordination with devolved administrations. With the roadmapping approach government will need to identify the policy levers and incentives that will catalyse change and provide business with long-term certainty for investment. Difficult and conflicting issues will need to be worked through to achieve an integrated and sustainable solution, rather than issues being "traded off" against each other. Indicators and milestones for measuring and evaluating progress will also need to be identified.

#### Continuing to build the evidence base

Building the evidence base to support the development of a coherent sustainable food strategy is crucial. Government needs to show greater confidence in translating its evidence-base into policy, once it has identified sustainability 'hot spots' and priorities for action. Sufficient resources will need to be made available for building a robust evidence base, and there needs to be a particular focus on contested and unclear sustainable food issues.

Evidence needs to be shared openly, and dialogue and engagement with stakeholders and other government departments, initiated. The evidence base needs to be translated into clear and consistent messages and priorities for the food chain, including the public.

We perceive the following issues as priority areas for further research:

- The synergies and tensions between a diet that is good for health and good for the planet
- The comparative greenhouse gas implications of different farming systems including intensive and organic production systems
- The social and environmental value of local, regional and seasonal foods
- The comparative sustainable development impacts of international and domestic production, taking account of development and environment perspectives, including impacts for rural economies in UK and overseas, sustainability of natural resources, and greenhouse gas emissions.

#### **Catalysing change**

To support its role as an 'enabler', government has a spectrum of policy interventions and tools at its disposal, ranging from encouraging voluntary initiatives and standards development, to fiscal incentives and regulation. Currently these are not being applied or evaluated systematically to catalyse change towards a sustainable food system.

As part of the roadmap approach, a systematic, rigorous evaluation of what policy measures work

well and what work less well, in what set of circumstances, is needed, so that effective enablers are identified. Existing difficulties with enforcing current regulations (such as on excess packaging) need to be addressed urgently. We also propose exploration of the role that a coherent set of standards could play in supporting development of a sustainable food system.

## **Priority areas for action**

The following are six issues of either major, long term importance to the UK, or where there are specific difficulties in the current food chain that require particular attention from government:

#### Climate change

The food chain currently contributes around a fifth of UK greenhouse gas emissions. Elements within the food supply chain are unclear how they contribute to the overall UK carbon emission reduction targets. Supermarkets have identified the need for a strategic plan into which their activities could fit, to include a clear narrative on how emission reductions from their own operations contribute (buildings and transport), and the role of carbon, nitrous oxide and methane emission reductions from the farming sector.

#### Waste

Supermarkets have a significant impact on packaging and food waste. Up to 40 per cent of food packaging cannot currently be recycled. Government needs to develop a Packaging Strategy identifying policies and measures to reduce packaging waste at source; to make progress towards closed loop recycling and materials systems in business; and to ensure the long-term waste treatment infrastructure is in place. Testing the 'consumer acceptance' aspect of packaging will be needed, to challenge current use of this clause as a reason for excessive packaging.

#### Water

Globally food production accounts for 70 per cent of water use. Government needs to address the growing environmental problem of the embedded water required in food products, and the impacts this has on water stressed areas. The methodology for assessing embedded water impacts remains undeveloped and we recommend that government supports the development of audit methodologies, similar to the life-cycle assessment now used for embedded carbon. Once the methodology is developed government could identify hotspots of embedded water consumption and use the product roadmap approach to explore policy options for reducing levels of embedded water.

#### **Ecosystems**

Sustainable food production is dependent on the health of farmland, forests and fisheries, yet twothirds of the world's ecosystems are in poor health. National governments, with their responsibility for ensuring the public good, have a role in ensuring that they protect the environment and achieve broader sustainable development. They can do this through the standards to which food is grown and traded. Evidence of ecosystems 'at risk' needs to be aligned with advice to producers, retailers and consumers on product sustainability, and retailers encouraged to choice edit more sustainable alternative products. In the UK we see a need for improved standards of environmental responsibility to be embedded into the baselines for environmental management that government requires, in return for the annual £1.5bn subsidy to some farmers, so the Little Red Tractor standard could become a Green Tractor, and in time would be required for achieving cross-compliance.

#### **Nutrition and obesity**

By 2010 a quarter of UK adults will be obese and will cost the economy £10bn. The amount and quality of food consumed by citizens play a significant part in this. Government needs to continue to harness the choice editing role of supermarkets, to reformulate products, shift the balance of promotions towards healthier products and influence consumer awareness of the impact of their food choices to support healthier eating. Government could also work at the EU level for mandatory nutrition labelling, including front of pack 'traffic light' labelling. Existing conflicts between health messages and sustainable diets (including sustainably sourced fish, meat and dairy) need to be resolved and policy message aligned for consumers and the food industry.

#### **Fair Supply Chains**

The distribution of value within food supply chains is an issue of contention between retailers and some producers, both in the UK and in developing countries. In the UK there is a need for government to articulate what fair trade means for UK-based supply chains, and we believe the role of the Office of Fair Trading should be amended to help secure UK supply chains that are operating under rules of fair trade. We have looked at the option of having a dedicated supermarkets' regulator and, on balance, believe that using the OFT more proactively on this agenda could help overcome the existing problems. International development policy also needs to support a more integrated approach to sustainable development so that achieving environmental sustainability in the producer country (particularly in the context of climate change, resource depletion and water stress) is given priority support, alongside fair distribution of value within the supply chain. Government policy to support developing countries' access to markets needs to reflect such a change in focus.

Detailed recommendations for each of these priority areas follows this summary, and the evidence and analysis is contained in the main body of this report.



## **Overarching recommendations**

#### Roadmap for a sustainable food system

SDC recommends that the Department for Environment, Food and Rural Affairs (Defra) works with retailers and stakeholders, including other government departments, particularly the Food Standards Agency, Department of Health, Department for International Development, Department for Transport, Treasury, Department for Business, Enterprise and Regulatory Reform, and in liaison with the devolved administrations, to develop a roadmap for a sustainable food system.

Specifically we recommend that this roadmap for a sustainable food system:

- Develops a shared vision for a sustainable food system that is ambitious and aspirational in setting long term goals
- Is backed by strong political leadership and ownership, that transcends short-term political change and provides business with long-term certainty for investment

- Is comprehensive including economic, social and environmental aspects and global impacts of the UK food supply system
- Provides consistency, including a consistent narrative across government departments and co-ordination with devolved administrations
- Provides clarity to current confusion over perceived trade-offs
- Identifies levers and incentives to accelerate progress towards the vision by providing clear priorities for government, retailers (and other food system businesses) and consumers
- Explores the role that a coherent set of standards could play in supporting development of a sustainable food system
- Provides indicators and milestones to measure and evaluate progress.

#### Facilitating cross government working

- SDC welcomes the Strategy Unit project on food and food policy<sup>3</sup> which is working with Defra, the Department of Health, the Food Standards Agency and other departments.
   SDC recommends that the Strategy Unit addresses the need for effective ways of working across government departments that facilitates joined-up sustainable food policy and delivery
- We also recommend that Departmental Programme Boards, created to achieve relevant input to areas of policy, include representatives from other government

- departments, and that this mechanism is exploited to enable much wider input across departments than currently achieved. We recommend a similar structure be established in the Devolved Administrations
- Where tensions exist between sustainable development priorities, we recommend these need to be resolved within a sustainable development framework to achieve an integrated, sustainable solution, rather than elements being 'traded off' against one another.

#### **Building the evidence base**

Government to continue to build the evidence base that will support the development of a coherent sustainable food strategy, and:

- Put sufficient resources into building a robust evidence base, with a particular focus on contested and unclear sustainable food issues
- Share evidence openly and initiate dialogue and engagement with stakeholders
- Engage closely with other government departments, research bodies nationally and internationally, to share and learn from emerging research
- Disseminate evidence in a way that is accessible and useful to external stakeholders including retailers
- Translate the evidence base into clear and consistent messages and priorities for the food supply chain, including the public
- Use evidence and engagement to inform policy development.

We recommend the following areas as priority areas for research:

- The synergies and tensions between a diet that is good for health and good for the planet
- The comparative greenhouse gas implications of different farming systems including intensive and organic production systems
- The social and environmental value of 'local', 'regional' and 'seasonal' foods
- Comparative sustainable development impacts of international and domestic production, taking account of development and environment perspectives, including impacts for rural economies in UK and overseas, sustainability of natural resources, and greenhouse gas emissions.

## **Recommendations by Department**

#### **Department for Business, Enterprise and Regulatory Reform (BERR)**

#### Climate change

- BERR (with Defra) to work with the food industry to develop a strategic plan for greenhouse gas emissions reductions across whole food supply system through to 2020; these 2020 targets to support UK trajectory for at least 60% cut in CO<sub>2</sub> emissions by 2050
- BERR (with Defra) to develop policy scenarios for meeting 2020 emissions goals, with roadmapping approach to identify policies to achieve sector emissions reductions
- The proposed Defra/BERR 2020 strategic plan to include contributions the sector could make from emissions reductions from own operations (including buildings, refrigeration, transport).

#### Waste

- BERR (with DIUS) to support innovation for designing out waste, through WRAP where appropriate e.g. an innovation platform, and demonstration and venture capital support for innovative ideas that struggle to come to market
- BERR (with Defra) to develop proposals for legislation, to ensure that voluntary agreements such as the Courtauld Commitment could be enforced if they do not deliver.

#### Water

- As part of the 2008 Water Strategy, BERR to work with industry and retailers across the food production, processing and retailing system to:
  - (with Defra), lead progress on water data collection within industry, to establish benchmarking of water consumption
- (with Defra), to set targets for water consumption reductions to be achieved across the food production and processing sectors, with particular emphasis on how action to reduce use in the highconsuming products and processes will contribute to the overall targets.

#### **Ecosystems**

#### BERR (with HMT) to:

 Require companies, through their reporting obligations under the Companies Act 2006 (reporting standards are expected to be reviewed late 2008) to report fully and with a defined rigour on their supply chains and their natural resource impacts.

#### Fair supply chains

#### BERR (with Defra) to:

 Articulate what fair trade means in UK-based food supply chains, including social justice and environmental sustainability.

#### BERR to:

 Consider amending the Terms of Reference of the Office of Fair Trading so its remit acts to safeguard fairness throughout supply chains.

#### BERR, with the Competition Commission, to:

In 2008/9 develop how the Office of Fair
Trading could ensure that UK supply chains
from producer to retailer, are operating under
rules of fair trade, including consideration
of the governance and scope of the
Supermarkets Code of Practice.

#### **Communities and Local Government (CLG)**

#### Climate change

#### CLG to:

 Maintain current ethos of Planning Policy Statement 6 giving planning priority to in-town store developments.

#### CLG (with DfT) to:

 Encourage local transport policies (through Sustainable Community Strategies, Local Development Frameworks and Local Area Agreements) to support the provision of bus routes, safe cycle lanes and walk-ways to shopping centres, both in-town and existing out of town shops, through the 2008-11 funding period.

## **Department for Environment, Food and Rural Affairs** (Defra)

#### Climate change

- Defra (with BERR) to work with the food industry to develop a strategic plan for greenhouse gas emissions reductions across the whole food supply system through to 2020; these 2020 targets to support UK trajectory for at least 60% cut in CO<sub>2</sub> emissions by 2050
- Defra (with BERR) to develop policy scenarios for meeting 2020 emissions goals, with roadmapping approach to identify policies to achieve sector emissions reductions
- The proposed Defra/BERR 2020 strategic plan to include contribution the sector could make from emissions reductions from own operations (including buildings, refrigeration, transport)
- Defra to work with the farming and food supply chain to develop a long term vision for reducing greenhouse gas emissions from farming and how this fits into the 2020 strategic plan,

- Defra to implement policies for tackling methane production and nitrates pollution from intensive farming. Lessons to be learnt from the implementation of the Nitrates Directive and Nitrates Vulnerable Zones to be developed into broader policy approach to reduce total nitrates input
- Defra to implement policies to support farmers and the food supply chain in

- finding appropriate solutions to agricultural waste and food waste, including the use of anaerobic digestion
- Defra to communicate a clear timetable for phasing out HCFCs in refrigeration by 2015, to support development of alternatives to HFC refrigerants (including hydrocarbons), and to advise the supply chain on replacements to HCFCs and HFCs.

#### Waste

- Defra Waste Strategy to be followed by a Packaging Strategy, developed with BERR, WRAP, manufacturers, producers and retailers to set out a clear ambition, and to identify policies and measures for:
  - reducing packaging waste at source, avoiding reliance upon downstream recovery and recycling
  - encouraging efficient use of compostable packaging, including clarification of the role of compostable packaging, labelling, and the most environmentally preferable way to deal with it post-consumer
  - ensuring the necessary long-term waste treatment infrastructure is in place
  - achieving progress towards closed loop recycling and materials systems in business.
- Defra (with the Environment Agency) to develop proposals for stronger and more effective delivery of Producer Responsibility Regulations and Packaging (Essential

- Requirements) Regulations. To include clarification of the ambition for packaging waste reduction and how these regulations can deliver on this
- Defra to convene consumer groups to identify ways of improving sustainable management of waste, such as testing the 'consumer acceptance' aspect of packaging in the Packaging (Essential Requirements) Regulations
- Defra (with BERR) to develop proposals for legislation, to ensure that voluntary agreements such as Courtauld could be enforced if they do not deliver
- Defra to work with local authorities and devolved administrations to improve consistency of recycling and composting schemes across England, Wales, Scotland and Northern Ireland.

#### Water

#### Defra to:

- Give reduction in water use a high priority in its definition of, and support for, a sustainable food and farming system in the Farming for the Future programme
- As part of the 2008 Water Strategy, work with industry and retailers across the food production, processing and retailing system to:
  - (with BERR) lead progress on water data collection within industry, to establish benchmarking of water consumption

- lead development of research methodologies for auditing embedded water (building on Life Cycle Assessment, such as for carbon)
- analyse the levels of embedded water for a broad range of different products and identifying 'hotspots' of embedded water
- (with BERR) Defra to set targets for water consumption reductions to be achieved across the food production and processing sectors, with particular emphasis on how action to reduce use in the

- high-consuming products and processes will contribute to the overall targets
- Defra and industry to use the product roadmap stepped approach for exploring

technical and policy options for reducing levels of embedded water in hotspot products and processes.

#### **Ecosystems**

Defra, with industry, to:

- Lead development of improved sustainability standards as the baseline for production standards i.e. Red Tractor standard to become a 'green tractor' for domestic food production by the end of 2010; compliance with Green Tractor standard to become requirement for cross-compliance subsidy receipt
- Jointly publish the evidence-base on ecosystems 'at risk' and products in danger of serious depletion or extinction, by end 2008
- Align this evidence-base with advice to producers, retailers and consumers on the sustainability of products by end 2008, and to encourage retailers to 'choice edit' more sustainable alternative products

- Fund (starting in 2008) more research into improved plant/crop strains that require reduced fertilisers and pesticides, and less water, to provide more opportunities for UK adaptation to non-intensive agricultural production
- Ensure that implementation of its Ecosystems Services Action Plan identifies upstream sources of water pollution, and develops means of reducing pollution inputs

Defra to work with industry in 2008/9 to:

 Convene a Sustainability Forum, furthering its convenor role for FISS, for exchange of information and evidence on sustainability issues in the food sector.

#### Fair supply chains

Defra (with BERR) to:

 Articulate what fair trade means in UK-based food supply chains, including social justice and environmental sustainability.

Defra and RDAs, industry bodies (NFU, CLA etc) to:

- Facilitate local supply chain infrastructure (e.g. hubs) and skills (e.g. marketing, accessing retailers, advice on meeting standards requirements)
- In 2008/9 raise the profile of skills issues through the Sector Skills Councils (reflecting sustainability challenges): for buyers, producers, logistics workers.

#### Defra (with FSA):

To develop an enforceable definition of local food.

Defra (with DFID and NGOs) to:

Develop an expanded standard that integrates
 Fair Trade standards with environmental
 sustainability, to provide retailers and
 consumers with a broader confidence in the
 overall impacts of the labelled products.

Defra (with DFID) by 2008 to:

 Articulate government's policy goals as achieving the joint goals of international development and environmental sustainability, reflecting integration of objectives, not trade offs. This articulation should acknowledge that longer term goals of full internalisation of the cost of carbon cannot be achieved in the short term, and therefore government policy is to support the concept of Fair Trade with environmental sustainability.

#### **Nutrition and obesity**

#### Defra (with FSA and DH) to:

 Work collaboratively during 2008 to identify synergies and conflicts between health promotion and sustainable diets (including sustainably sourced fish, meat and dairy) and align health and sustainability messages to consumers and the food industry.

#### **Department of Health (DH)**

#### **Nutrition and obesity**

#### DH (with FSA) to:

- Continue to harness the choice editing role of supermarkets during 2008, to reformulate products, shift balance of promotions towards healthier products and influence consumer awareness of the impact of their food choices to support healthier eating. If such an approach is insufficient, or creates conflicting reactions from the retailers (as with the food labelling work) it is our view that government should begin serious consideration of the role of regulation and/or legislation in requiring supermarkets to work with government to develop an influencing strategy, that will actively help citizens to make more sustainable food choices
- Set targets for uptake of 'traffic light' labelling in 2008 and lobby at EU level for mandatory nutrition labelling including front of pack 'traffic light' labelling
- To audit the effectiveness of proposed government social marketing campaigns to help citizens make healthier choices.

#### DH (with FSA and Defra) to:

 Work collaboratively during 2008 to identify synergies and conflicts between health promoting and sustainable diets (including sustainably sourced fish, meat and dairy) and align health and sustainability messages to consumers and the food industry.

## **Department for Innovation, Universities and Skills** (DIUS)

#### Waste

#### DIUS to:

 DIUS (with BERR) to support innovation for designing out waste, through WRAP where appropriate, e.g. an innovation platform, and demonstration and venture capital support for innovative ideas that struggle to come to market.

#### **Department for International Development (DFID)**

#### **Ecosystems**

#### DFID to:

 Support producers in developing countries to meet higher standards of sustainability in their agricultural practices (to meet equivalent 'green tractor' standards/ enhanced GlobalGap standards) by 2009.

#### Fair supply chains

- In 2008 review its existing policies on less developed country development to ensure that support for agricultural expansion and access to overseas markets is based on fair distribution of value within the chain (Fairtrade type standards), as well as mitigating against overuse of natural resources or degradation of biodiversity, particularly in the context of changes in water patterns with climate change
- Development policies need to be 'futureproofed' against the emerging impacts of climate change on growing regions, the implications of carbon constraints/pricing, and the effects on domestic production and food security.

#### DFID (with Defra and NGOs) to:

Develop an expanded standard that integrates
 Fairtrade standards with environmental
 sustainability, to provide retailers and
 consumers with a broader confidence in the
 overall impacts of the labelled products.

#### DFID (with Defra) by 2008 to:

 Articulate government's policy goals as achieving the joint goals of international development and environmental sustainability, reflecting integration of objectives, not trade offs. This articulation should acknowledge that longer term goals of full internalisation of the cost of carbon cannot be achieved in the short term, and therefore government policy is to support the concept of fair trade with environmental sustainability.

#### **Department for Transport (DfT)**

#### Climate Change

#### DfT to develop:

- Further incentive structures to support increased use of rail freight by supply chains
- Further promotion of lower-carbon transport technologies (such as hybrid trucks)
- Improved accreditation and labelling for the RTFO, so genuinely sustainable biofuels (use of waste oils) are encouraged.

#### DfT (with CLG) to:

 Encourage local transport policies (through Sustainable Community Strategies, Local Development Frameworks and Local Area Agreements) to support the provision of bus routes, safe cycle lanes and walk-ways to shopping centres, both in-town and existing out of town shops, through the 2008-11 funding period.

#### **Environment Agency** (EA)

#### Waste

 Environment Agency (with Defra) to develop proposals for stronger and more effective delivery of Producer Responsibility Regulations and Packaging (Essential Requirements) Regulations. To include clarification of the ambition for packaging waste reduction and how these regulations can deliver on this.

#### Food Standards Agency (FSA)

#### **Ecosystems**

#### FSA to:

 Work with Defra to align its advice on fish consumption for health with evidence on sustainable sourcing.

#### **Nutrition and obesity**

#### FSA (with DH) to:

Continue to harness the choice editing role of supermarkets, during 2008 to reformulate products, shift balance of promotions towards healthier products and influence consumer awareness of the impact of their food choices to support healthier eating. If such an approach is insufficient, or creates conflicting reactions from the retailers (as with the food labelling work) it is our view that government should begin serious consideration of the role of regulation and/or legislation in requiring supermarkets to work with government to develop an influencing strategy, that will actively help citizens to make more sustainable food choices

- To set targets for uptake of 'traffic light' labelling in 2008 and lobby at EU level for mandatory nutrition labelling including front of pack 'traffic light' labelling
- To audit the effectiveness of proposed government social marketing campaigns to help citizens make healthier choices.

#### FSA (with DH and Defra) to:

 Work collaboratively during 2008 to identify synergies and conflicts between health promoting and sustainable diets (including sustainably sourced fish, meat and dairy) and align health and sustainability messages for consumers and the food industry.

#### **Fair Supply Chains**

#### FSA (with Defra)

• To develop an enforceable definition of local food.

#### RDAs and local government

#### **Ecosystems**

By 2009 RDAs and local government to:

Ensure that Defra's Ecosystem's Services
 Action Plan is implemented across regional
 and local areas, to ensure that local
 ecosystem-wide solutions to water pollution
 and negative impacts on biodiversity are
 tackled effectively.

#### **Treasury** (HMT)

#### **Nutrition and obesity**

#### HMT to:

 Explore during 2008/9 the imbalance in the way VAT is currently applied to food, and outline fiscal measures for redressing the imbalance which will support encouragement for uptake of healthy and sustainable food.

#### **Ecosystems**

HMT (with BERR) to:

 Require companies, through their reporting obligations under the Companies Act 2006 (reporting standards are expected to be reviewed late 2008) to report fully and with a defined rigour on their supply chains and their natural resource impacts.

#### Scotland

#### Policy opportunities in Scotland and emerging recommendations

In the forthcoming National Food Policy, the **Scottish Government** to:

- Develop a strategic plan for greenhouse gas emissions across the whole food supply system to support the trajectory for at least 60% cut in CO<sub>2</sub> emissions by 2050 (we commend the Scottish Government for proposing 80% cuts by 2050 in the draft Climate Change Bill and would welcome policies to deliver on this target, but base this recommendation on the current UK Climate Change Bill commitment)
- Work with the farming and food supply chain to develop a long-term vision for low carbon farming; implement policies to support farmers and the food chain in finding appropriate solutions to agricultural waste and food waste, including the use of anaerobic digestion
- Harness the choice-editing role of supermarkets during 2008 to influence consumer awareness of the impact of their food choices and improve diet-related health

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- Support further incentive structures to support increased use of rail freight by supply chains
- Support promotion of lower carbon transport technologies.

**Scottish Government** to work towards zero waste, and to:

- During 2008, set out a refreshed Waste Action Plan to move Scotland towards zero waste, identifying the role of retailers and consumers
- Work with SEPA and WRAP to ensure a consistent approach on waste and resource efficiency across the supply chain; work with retailers, manufacturers and others to develop initiatives to reduce packaging and food waste

 Work together with willing local authorities to increase recycling and phase out single-use carrier bags in retail stores, and publish an action plan showing key milestones towards 2010, 2013 and 2020 targets. This Action Plan should be framed around the move to zero waste and set out how the Scottish Government will go beyond the existing waste stabilisation target.

In the expected 2008 National Planning Framework, the **Scottish Government** to:

- Maintain current ethos of Planning Action Note 59 giving planning priority to in-town store developments
- Develop land use planning policies to reduce the need to travel and enable sustainable access (including integrated transport planning, provisions for walking and cycling) to town centres and services.

#### Wales

#### Policy opportunities in Wales and emerging recommendations:

**Department for Rural Affairs** to place sustainable food production and consumption principles at the core of the forthcoming *Sectoral Strategies*, including:

- Reduction in water use to be given a high priority in definition of, and support for, a sustainable food and farming system
- Development of improved sustainability standards as the baseline for production standards, working with Defra and other devolved administrations on the potential for a 'green tractor' for domestic production.

**Welsh Assembly Government** to deliver on its commitment to 3% reductions in carbon-equivalent emissions, and to:

 During 2008, develop a strategic plan for greenhouse gas emissions across the food supply system in Wales to support the trajectory for at least 60% cut in CO<sub>2</sub> emissions by 2050

- Support further incentive structures to support increased use of rail freight by supply chains
- Support promotion of lower carbon transport technologies.

**Department for Rural Affairs**, in the forthcoming *Farming Strategy*, to:

- Work with farming and food supply chain to develop long term vision for 'low carbon' farming and how this fits into the 2020 strategic plan
- Develop roadmapping approaches in Wales to achieve sector greenhouse gas emissions reductions, building on the product roadmapping work carried out by Defra, including for the dairy sector
- Facilitate improvements in local supply chains – infrastructure (e.g. hubs) and skills

- (e.g. marketing, accessing retailers, advice on meeting standards requirements)
- In 2008/9 raise the profile of skills issues through Farming Connect (reflecting sustainability challenges) for buyers, producers, logistics workers.

**Department for Environment, Sustainability and Housing,** building on the *Wales Waste Strategy* 2002, to:

- During 2008, set out a clear strategy to move Wales towards zero waste, identifying the role of retailers and consumers, and policies to reduce waste at source (not just downstream recovery and recycling), and achieve progress towards closed loop recycling and materials systems in business
- Work with the Environment Agency and WRAP to ensure a consistent approach on waste and resource efficiency across the supply chain, and work with retailers, manufacturers and others to develop initiatives to reduce packaging and food waste

 Work together with willing local authorities to phase out single-use carrier bags in retail stores.

**Department for Public Health and Health Professions** in the forthcoming Quality Food
Strategy to:

 Harness the 'choice-editing' role of supermarkets, during 2008, to influence consumer awareness of the impact of their food choices and improve diet-related health.

**Welsh Assembly Government**, in policies to be developed as part of implementation of *One Wales*, to:

- Maintain current ethos of Technical Advice Note 4 giving planning priority to in-town store developments
- Encourage local transport policies to support the provision of bus routes, safe cycle lanes and walk-ways to shopping centres, both intown and existing out of town shops.



### 2.1 Purpose of the review

The purpose of this review is to advise UK government and devolved administrations on the effectiveness of their policies towards the food system and supermarkets, and the extent to which these policies are helping or hindering progress towards sustainable development. The report gives clear and specific advice to UK government and the devolved administrations on how to improve the effectiveness of policy interventions, and how gaps can be addressed.

## 2.2 Our approach

The assessment draws on SDC's own analysis and policy mapping exercise. We also commissioned independent qualitative research to get the views of both the supermarkets and their stakeholders.

Our focus is on the role of national governments in Westminster and the devolved administrations. We recognise these sit within the framework of EU and global governance, as well as relating to local and regional government.

The review covers a breadth of public policy areas, including climate change, nutrition, sustainable production and consumption, waste, energy, transport, competition, agriculture and planning. From this broad base and scope we identify six priority areas. We recognise there are other important elements of a sustainable food system, such as food safety and animal welfare that we do not address.

In approaching this work, the SDC's particular interest was the extent to which government policies are working in the round, i.e. do different policies support or conflict with each other? For example do current agricultural policies support the need to tackle climate change? To what extent do nutrition policies align with environmental priorities? By looking at the cohesiveness of government's approach towards a sustainable food system, we were able to assess the extent to which government is meeting its own declared aspiration to achieve sustainable development.

We make recommendations to government for immediate action in priority areas and identify leadership roles and recommendations for government in addressing longer term challenges.

We do not make recommendations to

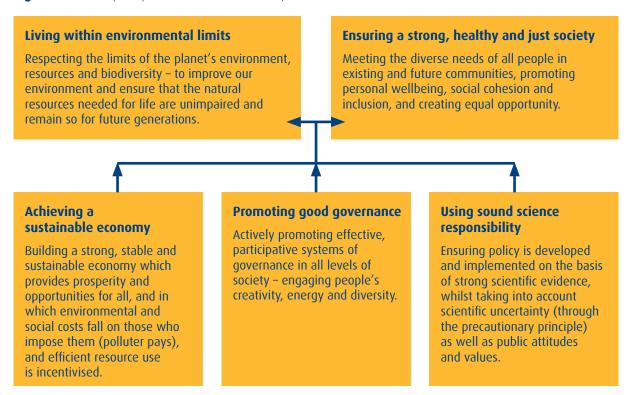
the supermarkets or the food industry, while acknowledging the important role that businesses have in tackling environmental and social challenges through their own operations, supply chains and relationships with customers, employees and communities.

For the purposes of this review we have defined the food system as all interconnected processes of food production and consumption. Within this, we concentrate specifically on government's relationships and policies towards the large multiple grocery retailers due to their influence within the retail food system. There are many definitions of a supermarket; we refer to the generic multiples with the largest market share for grocery products in the UK.4 We do not address the role of alternative retail outlets including small shops, local markets, farmers' markets, organic box schemes, specialist grocers and community food initiatives, though we acknowledge the positive contribution to sustainable development such alternative retail outlets can make. Also outside the scope of this review is the impact of supermarkets on retail diversity and local shops.

As our focus is food, we do not address non-food retail items that supermarkets sell, such as clothing, consumer electronics, personal care products and garden and household furniture though recognise these also have environmental and social considerations associated with their production.

We have used government's own 'principles of sustainable development', and its goal of integration (rather than trade-offs) of economic, environmental and social outcomes as the lens through which we have made our assessment.

**Figure 1** The principles of sustainable development

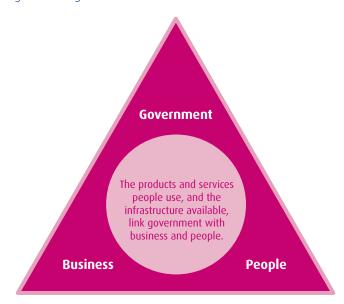


**Source:** Securing the Future, HMG, 2005

This review builds on the work of the Sustainable Consumption Roundtable and its report *I will if you will,*<sup>5</sup> which advocates that only concerted action from government, business and people in

tandem will achieve a radical shift towards more sustainable lifestyles. Our review focuses on the role of government within this 'triangle of change' (see Figure 2).

**Figure 2** The 'triangle of change'



**Source:** Sustainable Development Commission/ National Consumer Council (2006) I will if you will

## 2.3 Our methodology

Our evidence base was developed using the following methodologies:

- A mapping of current government policy towards retailers and a sustainable food system
- A qualitative survey of retailers and stakeholders from the industry, academia and civil society. The research was conducted on behalf of the SDC by Opinion Leader Research in Spring 2007, with a sample size of 37 interviewees, including participants based in Scotland, Wales and Northern Ireland. A report of the findings is available on the SDC website.
- Individual meetings with stakeholders including retailers and industry bodies, government departments and agencies, academics, consumer and NGO organisations
- A workshop: A major theme to emerge from the surveys is that the lack of a strong

government vision of what a sustainable food system should entail is currently perceived to present a problem to retailers. To develop thinking and build consensus towards a shared vision, the SDC convened a workshop on 20 June 2007, exploring issues around a vision for a sustainable food system and debating its purpose, scope, and responsibilities. This involved government officials, representatives of the food retailers, academics and consumer and environmental interest groups. A report of the workshop is available on the SDC website.

We have benefited from the experience of two expert groups, a Government Reference Group made up of officials across key government departments, and an External Advisory Group consisting of stakeholders from the industry and civil society. These two groups have met regularly throughout the review to provide information, opinion and feedback. Responsibility for the content and conclusions of the report rests with the SDC.



Supermarket food is inextricably linked to many of the toughest challenges faced by Britain today – from obesity to climate change, to waste and global poverty. The current cost of obesity to the economy, for example, is estimated to be up to £10 billion a year and is forecast to reach £50 billion per annum by 2050.<sup>6</sup> Food, through the way it is produced, distributed and consumed, is the average household's single largest contributor to climate change<sup>7</sup> and the food system is also a major source of waste, with 6.7 million tonnes of food waste generated by UK homes – equivalent to 15 million tonnes of CO<sub>2</sub>.<sup>8</sup> Many livelihoods in rural communities, both in the UK and globally, depend upon the UK's food system.

For example, one million people in rural Africa are supported by the fresh fruit and vegetable trade with the UK, injecting an estimated £200 million into rural economies. Table 1 illustrates key environmental, social and economics impacts of the food system. UK Government has a clear public mandate to tackle these challenges. In doing so, it draws on a plethora of policy interventions, many of which impact on supermarkets and their food supply chains.

Supermarket chains sit at the heart of the modern food system, shaping its workings, with influence on how products are grown, packaged, processed and manufactured, transported, marketed and consumed, and how waste is disposed of. They have a powerful role to play alongside government to develop solutions to sustainable development challenges.

#### 3.1 Structure of food retail within food system

In 2007, supermarket chains accounted for just under three quarters of UK consumer grocery sales (73%).<sup>37</sup> Figure 3 illustrates where supermarket sales fit in the overall food chain. Consumer spending of £154bn, is split (by value) between purchases in retail outlets and food service, reflecting the growth of the eating-out market in the UK.

The food retail sector is also highly economically concentrated.<sup>38</sup> In 2006, the largest four supermarket

chains – Tesco, Asda, Sainsbury's and Morrisons – controlled over 70% of the UK grocery market (see Figure 4). Buying is concentrated among a few companies, who tend to relate to a handful of suppliers. Competition Commission and others' figures show that that 75% of apples, 80% of fresh potatoes, 65% of milk, 85% of beef, 81% of port, 90% of lamb are bought from the multiple food retailers.<sup>39 40</sup>

#### **Environmental limits**

- EU food consumption accounts for 31% of all consumption-related emissions<sup>10</sup>, in the UK the figure is estimated at 19%.<sup>11</sup>
- Globally, livestock accounts for 18% of greenhouse gas emissions. 12
- In the UK, meat and dairy production accounts for 8% of total UK GHG emissions. 13
- 5.2 million tonnes of food-related packaging waste and 6.7 million tonnes of food waste are generated from UK homes each year.<sup>14</sup>
- The external cost of food transport has been estimated at between £1.9 billion and £4 billion.<sup>15</sup>
- Agriculture globally consumes 70% of all freshwater extracted for human use.
- In the UK, agriculture uses 742 million m³ of water, and the food and drink industry uses 155 million m³.17
- It takes 13 litres of water to produce a 70g tomato, 200 litres of water for a 200ml glass of milk, and 2400 litres of water to produce a 150g hamburger.<sup>18</sup>
- The food system is also a major source of land, forestry, fisheries and water degradation.
   15 out of 24 of the world's ecosystem services are being degraded or used unsustainably according to the Millennium Ecosystem Assessment.<sup>19</sup>
- Three-quarters of the world's fish stocks are fully or over-exploited.<sup>20</sup>
- Conversion of land to palm oil production for use in food processing (and cosmetics and other household products) has accounted for 87% of deforestation in Malaysia between 1985 and 2000.<sup>21</sup>

#### Strong, healthy and just society

- Between 1993 and 2005, the proportion of men classified as obese increased from 13% to 22%, whilst among women the proportion rose from 16% to 24%.<sup>22</sup>
- Diet related ill health is responsible for about 10% of deaths in the UK.<sup>23</sup>
- 30,000 deaths a year in the UK are related to obesity.<sup>24</sup>
- 67.1% of suppliers report relationships between retailers and suppliers to be a problem, compared to only 35.6% of retailers.<sup>25</sup>
- For every £1 spent on cashew nuts in British supermarkets, 77 pence goes to importers and retailers, 22 pence to traders and processors, and just one pence to farmers.<sup>26</sup>
- 1 million people in rural Africa are supported by the fresh fruit and vegetable trade with the UK, injecting an estimated £200 million into rural economies in Africa.<sup>27</sup>

#### Sustainable economy

- The UK has 6,691 food and drink manufacturing enterprises,<sup>28</sup> with an economic value of £21.1 billion (GVA).<sup>29</sup> It is the single largest manufacturing sector in the UK.
- In December 2005, over 1.2 million people were employed in UK food and drink retailing, almost 5% of UK employees. Over 60% of these employees were part-time or female (45% were both part-time and female).<sup>30</sup>
- Consumer expenditure on food<sup>31</sup> accounts for approximately £160bn annually in the UK.<sup>32</sup>
- Farmers' share of a basket of food staples has fallen by 23% between 1988 and 2006.<sup>33</sup>
- The number of migrants working in the countryside has increased by 200% between 2004 and 2007, many seeking employment in agriculture.<sup>34</sup>
- Supermarkets account for around three-quarters of the burgeoning £1.9 billion organic market.<sup>35</sup>
- Current economic costs of obesity to the UK economy are estimated at £10 billion a year.<sup>36</sup>

**UK** consumers 60 million people **Consumers' Expenditure Household Expenditure** on catering services on food and drink £75bn £79bn **Grocery Retailers Caterers** Gross value added £18.8bn Gross value added £21.1bn 1,160,000 jobs 1.377.000 iobs Enterprises 111,578 Exports £9.7bn Food and Drink Wholesalers Unprocessed £0.7bn Lightly processed £3.6bn Highly processed £5.6bn Gross value added £7.8bn Food and Drink Manufacturing es everything from primary processing (milling, malting, slaught mplex prepared foods. Many products will go through several st Gross value added (excluding animal feed GVA) **£21.1bn** Agricultural wholesalers **Food & Drink Supply** added £734m led £433m Distribution **Agricultural Supply Farmers and Primary Producers** (Animal feed manufacturin agricultural machinery, fertilizers & pesticides) Gross value added £5.2bn Farm holdings 307,000 Total CAP subsidies (less levies & taxes) £3.0bn Total agricultural land area 18.5 million hectares Gross value added £1.1bn 26,000 jobs Enterprises 1,647 541,000 iobs **Fishing & Fish Farming** Imports £23.3bn Gross value added £362m 11,000 jobs Enterprises 3,827

**Figure 3** Locating supermarkets in an economic summary of the UK food supply chain

Source: ONS/Defra data and IGD data in Defra (2006). Food Security and the UK: An Evidence and Analysis Paper. London, Food Chain Analysis Group of the Department of Environment, Food & Rural Affairs. p.52

#### 3.2 How are retailers responding to the sustainability challenge?

Major UK food retailers are increasingly exercised by the challenges ahead<sup>41 42</sup> and are making important commitments towards greater sustainability. Many of these relate to retailers' own operations, for example increasing the energy efficiency of their operations and transport, including making some shifts from road to rail, cutting waste and increasing

recycling. Longer term commitments include becoming carbon neutral (Asda, Co-op and Marks and Spencer); cutting carbon footprint from stores and distribution centres by 50% by 2020 (Tesco); zero waste to landfill by 2010 (Asda) and by 2012 (Marks and Spencer), and cutting waste by 50% by 2010 (Sainsbury's) and by 80% by 2009 (Tesco).<sup>43</sup>

35 30.4% 2002 2003 2004 2005 30 25 Share of till roll sales (%) 20 16.5% 15.9% 15 10.3% 10 5.6% 5 sainsbury's Co-ops **Tesco** Asda Morrisons Iceland Netto Safeway Aldi Somerfield Vaitrose 틴

**Figure 4** National sales shares by grocery retailer, 2001 to 2006

Source: Competition Commission (2006). *Groceries Market: Emerging Thinking*. London: Competition Commission. S32, p.15.

Most of the large retailers are now investing in and/or sourcing renewable energy and developing model green stores.

Some are addressing sustainable supply chains by 'choice editing'. For example, Marks and Spencer plans to only sell fish that is MSC-certified, whilst Sainsbury's aims to convert its top five selling fish species to 'green status' by 2010.44 Sainsbury's has also converted its entire banana range to Fairtrade, 45 plans to make 100% of its own label tea Fairtrade,46 and is working with its supply chain to procure sustainable palm oil as soon as it is commercially available.47 Marks and Spencer48 and Tesco49 have introduced 'airfreight' labels for produce and Tesco is also developing a 'carbon label' for products.50 Retailers are also successfully growing 'healthy', 'green' or 'ethical' markets, for example for local, fairtrade or organic produce. The UK's ethical market was valued at £29.3 billion in 2005, up 11% on the previous year.51 In 2006 this included £4.8bn spent on ethical food and drink, a 17% annual increase.52

In theory niche markets provide consumer choice, but choice only for those consumers willing or able to pay typically premium prices and with the interest and knowledge to seek out such products.

SDC's research with retailers and stakeholders gauges perceptions towards such retailer initiatives. This found that supermarkets are seen to be making some tangible efforts around energy saving instore and in distribution, and packaging and waste primarily through recycling. Action in these areas of activity is perceived to be driven by a combination of financial savings, high visibility (with respect to packaging) and its fit with government policy.

Whilst there was recognition by survey participants that it is early days and activities linked to sustainability are difficult to measure, there are some supermarket chains that are perceived to be taking more action to tackle climate change and sustainability than others, with Marks and Spencer seen to be leading the field.

Overall though, many non-retail stakeholders felt that the majority of supermarkets are not yet doing enough to improve sustainability in the food supply chain. There are high levels of cynicism about motives being purely financial, for PR purposes or to pre-empt legislation. Many are also sceptical about supermarkets actually delivering on their claims.

There is a consensus of opinion again amongst non-retailers that supermarkets maintain a very poor record when it comes to treatment of suppliers.

Retailers themselves see climate change as a key area of concern for their businesses, but are keen to point out there are other areas of priority, such as Fairtrade and sourcing. Most retailers are able to cite numerous examples of the areas where they have taken action, and claim to have been doing so for an extended period of time; however, non-retailers are somewhat less convinced.

Furthermore, interviewees identified a fiercely competitive retail market, where sustainability

has become another point of differentiation, as hindering approaches which seek collaborative solutions to challenging sustainability issues.

Evidence from National Consumer Council (NCC) research, conducted in April 2007, demonstrates that retailers are making progress towards helping customers make 'greener' choices but the NCC concludes that some retailers are making more progress than others.<sup>53</sup> As in its previous survey,<sup>54</sup> no retailer scored well across every indicator.

We conclude that major UK food retailers are making important commitments towards greater sustainability. This is encouraging, though their actions are not yet an adequate response to the sustainability challenge. There is further significant potential for food retail power to be used as a positive lever for change though supermarkets' influence over supply chains and products, towards their customers, employees and over their own operations.

#### 3.3 Government's engagement with supermarkets

There are tensions in government in relation to supermarket food policy. On the one hand, government does not want to be seen to be interfering in the free market. On the other hand, the scale and concentration of supermarkets means that they have a huge impact on public goods, such as land and water, which government has a mandate to protect. Government also needs the influence of retail power to help it deliver public policy goals.

Despite not wanting to be seen interfering in the commercial activities of the retail sector, in reality government – and its various departments, agencies, regulators and delivery bodies – has an array of policies, initiatives and regulations that aim to influence the food system and supermarkets.

The Competition Commission and Office of Fair Trading, for example, address market concentration. The Environment Agency (England and Wales), Scottish Environmental Protection Agency (Scotland) and NI Environment and Heritage Service (Northern Ireland) oversee waste, water and air quality legislation. Arms-length delivery bodies, such as WRAP, oversee the implications of waste and its reduction. The Food Standards Agency sets and

advises on food safety and nutrition standards. The Department for Transport oversees the motorway and road infrastructure on which the retailers' logistics systems rely. Defra leads on agriculture, food chain and environment policies while BERR leads on relationships and policies towards the retail sector.

In central government alone, our mapping exercise identified 19 central Whitehall departments that cover virtually 100 policy areas and responsibilities – from animal welfare to congestion charging, from planning to diet and nutrition. Some of these policies belong to UK Government, others – such as agriculture, fisheries and forestry, environment, health, transport and planning – are devolved to governments in Scotland, Wales and Northern Ireland. Scottish Government, for example, has ten directorates and agencies, covering around twenty policy areas (see Appendix 1).

Hence, our starting point for this review is not whether government should use policy interventions to influence supermarkets and the food system, but how effective these interventions are in achieving government's own aims.



#### In this section we examine:

- The effectiveness of current government policies to support retailers to deliver a more sustainable food system (4.1), and
- The effectiveness of action by government to meet targets for six priority sustainable development issues (4.2).

This section examines UK and English government policies. We do not examine policies in Scotland, Wales and Northern Ireland in the same depth. In Appendix 2 we provide a summary of Scottish and Welsh policy contexts and present some emerging recommendations that we advocate be considered in forthcoming policy development. We also give an overview of relevant Northern Ireland policies. The retailer initiatives we summarise for the six priority issues are largely relevant to the whole of the UK.

# 4.1 Do existing policies help retailers deliver a more sustainable food system?

SDC conducted a mapping exercise of government policies towards sustainable food and supermarkets. Appendix 1 summarises the responsibilities of departments, including those within the devolved administrations, and in this chapter we present government's current approach in the six priority areas.

We found that government has a range of high level commitments, for example towards sustainable development, 'one-planet farming', promoting competitive markets, supporting international development and tackling climate change and obesity. It also has a range of policies and initiatives to address various elements of a sustainable food system, for example, the Food Industry Sustainability Strategy, Waste Strategy, Sustainable Farming and Food Strategy, Food and Health Action Plan, product roadmapping initiatives and consumer behaviour research. Similarly Wales, Scotland and Northern Ireland have a range of agriculture and nutrition strategies.

We found a lack of clarity on how high level goals translate to retail sector specific priorities and how different initiatives are intended to work together. This was echoed by our research exploring retailers' and other stakeholders' perceptions towards government policies. <sup>55</sup> Overall, this found that participants welcomed government initiatives including The Carbon Trust and the Food Industry Sustainability Strategy, though government was not seen to have played a leading role in helping supermarkets to improve the sustainability of the food system.

The key criticisms stakeholders (both retailers and non-retailers) have of government policy to date are:

- A lack of long term vision crucial if business is to make financial investment in change
- Lack of joined up strategy and framework there are seen to be plenty of initiatives but these have no common objective, and there are numerous targets but these lack the necessary detail behind them
- Conflicting views from different government departments (e.g. DFID and Defra) – resulting in a lack of consistency
- Government's lack of clarity on contested sustainable development issues.

# Joined-up policies and delivery

Sustainable development provides a new lens through which to view and tackle complex policy issues. Responsibilities within government that used to be viewed separately, such as 'agriculture', 'health', 'energy', 'planning' and 'transport' are now being recognised as elements of a bigger sustainable development picture. Complex issues such as climate change and obesity are posing new challenges for coherent, cross-government policy making and delivery.

# "Sustainability doesn't fit neatly into one department."

Government agency<sup>56</sup>

Achieving consistency of policies is a government objective highlighted in its Sustainable Development Strategy.<sup>57</sup> Ensuring policies are 'joined-up' across policy areas and departments is a challenge for government. It is not a new challenge nor restricted to sustainability issues, though sustainability is

arguably the ultimate 'joined-up' challenge. Despite an increasing awareness within government of the need for better 'joined-up' working,<sup>58</sup> our research identifies this as a barrier towards progress for a more sustainable food system.

The UK government's set of guiding principles to assist delivery of 'sustainable' policy-making (see Fig 1) provides a valuable approach – and one which the SDC champions and uses in its own analysis and policy development. The principles are intended to be applied without 'trade offs' so that solutions are found which reconcile the priorities of a strong, healthy, just society while also living within environmental limits. We have found its application in the context of policy for a sustainable food system has yet to be fully implemented and tested. For example, government nutrition policies promote a diet that is good for our health but this is

not yet aligned with evidence of the environmental (including climate change) impacts of food.

We found rising frustration among retailers over what they perceived to be apparent conflicting priorities of different departments, and government's lack of clarity on contested sustainable development issues. For example, retailers in our survey<sup>59</sup> said they want more clarity from government on the value of 'local' food versus the value to overseas development from foods such as green beans air-freighted from Kenya.

These examples illustrate the challenges businesses and consumers face in determining what are more sustainable food choices. Government's apparent nervousness to steer policy debate through the complexities of these sustainability issues gives rise to the perception of a lack of consistent messages from government.

### Recommendations

Developing and delivering a vision for a sustainable food system, with policies aligned behind this, will require improved policy focus and consistent messages that are supported across all government departments and agencies. Single-departmental

- SDC welcomes the Strategy Unit project on food and food policy<sup>60</sup> which is working with Defra, the Department of Health, the Food Standards Agency and other Departments.
   SDC recommends that the Strategy Unit addresses the need for effective ways of working across government departments that facilitate joined-up sustainable food policy and delivery.
- We also recommend that Departmental Programme Boards, created to achieve relevant input to areas of policy, include representatives from other government departments, and that this mechanism is exploited to enable much wider input across departments than currently achieved.
   We recommend a similar structure be established in the devolved administrations.

interests and priorities will need to be overcome, and integrated into the holistic vision and delivery. This will require better cross-departmental working and delivery.

 Where tensions exist between sustainable development priorities, we recommend these need to be resolved within a sustainable development framework to achieve an integrated, sustainable solution, rather than elements being 'traded off' against one another.

# 4.2 How effectively is government meeting targets?

We have examined in greater depth how effective government policies are in meeting targets in six priority areas where SDC considers government has an opportunity and a role to work with retailers (and other stakeholders) to improve sustainability outcomes:

- · Climate change
- Waste
- Water
- Ecosystems
- · Nutrition and obesity
- Fair relationships within supply chains.

### In determining our six priority issues we have taken into account:

- Findings of SDC's research with retailers and stakeholders
- Elements for a sustainable food system vision identified at SDC's workshop
- Trends and evidence concerning each issue, and their relative importance and impact on sustainable development
- The scope for further action from government and retailers to catalyse further change.

# For each issue we identify:

- Why the issue is a priority
- Government's current approach
- How retailers are responding
- Gaps in government/retailer policies and initiatives
- Recommendations for government to catalyse further change.



# 4.2.1 Climate Change

### What is the issue?

The UK's greenhouse gas emissions from food account for at least a fifth of total emissions.<sup>61</sup> In the context of this report, SDC has gathered evidence from the supermarkets themselves to test whether the broad range of government policy in this highly complex area, is achieving its goal with this particular sector.

Tackling greenhouse gas emission reductions can be achieved through concentrating policy upstream in food production and processing, through the retailers, or downstream with consumers. In SDC's view all elements of this supply chain need to be incentivised to reduce emissions, as the urgency of the climate change problem, and the need for early action (to reduce emissions and costs later) requires a holistic approach.

Our research with supermarkets revealed that from their perspective, there is an inconsistency in coverage and approach to reducing their emissions. Supermarkets recognised the policies directed at reducing their emissions (the emissions trading through the proposed Carbon Reduction Commitment, the building labelling required under the Energy Performance of Buildings Directive, the fiscal and market transformation programme focused on specific energy saving technologies), but they felt that their extensive transport requirements were not being given similar attention. So although the overall cost of transport fuel may fluctuate with global energy prices and taxation, supermarkets do not perceive a climate change policy focus to this particular element of their operations. Improved efficiencies that are stimulated by increased transport fuel costs, are not seen by supermarkets primarily as an effort to reduce their emissions, more as normal business efficiency practice. From their perspective a set of policies for tackling climate change from transport emissions should be more comprehensive, structured and offering incentives - perhaps focusing on technology shifts (to low carbon vehicles), low carbon fuels, more leadership on efficiencies and driver behaviour, and incentives for using rail freight rather than road.

Food, through the way it is produced, distributed and consumed, is the UK households' single largest contributor to climate change impacts.<sup>62</sup> As Figure 5 shows agriculture makes the largest contribution.<sup>63</sup>

This is mainly from emissions of nitrous oxide (largely from fertiliser use, both inorganic and organic, on food and feed crops) and methane emissions from ruminant animals (primarily dairy cows, beef cattle and sheep) rather than carbon dioxide emissions from fossil fuels.<sup>64</sup> UN Food and Agriculture Organisation reports that the livestock sector globally generates more greenhouse gas emissions as measured in CO<sub>2</sub> equivalent, 18%, than transport.<sup>65</sup>

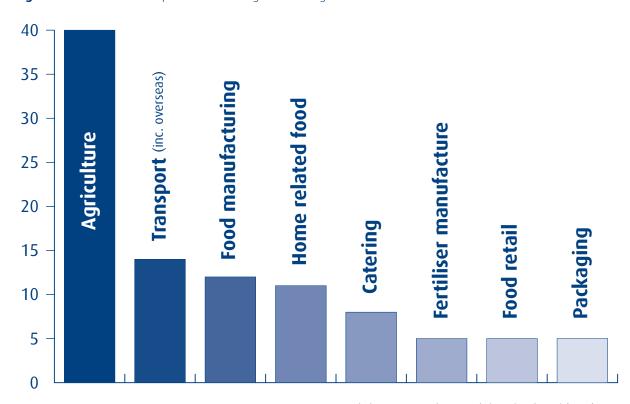
For plant-based food and drink products, the greatest global warming potential is from energy used during refrigeration, storage, processing and transport.<sup>66</sup>

Greenhouse gas emissions vary by foods but 'hotspots' include:<sup>67</sup>

- Meat and dairy production (accounting for 8% of total UK emissions)
- Glasshouse vegetables
- Air-freighted fresh produce
- Heavily processed foods
- Refrigeration (energy use and impact from refrigerant gases e.g. HFCs).

Food retail has been estimated to account for 0.9% of total UK GHG emission through use of lighting, heating, cold stores and on-shelf refrigeration<sup>68</sup> and approximately 5% of total food-related emissions. Of greater significance are emissions from energy used elsewhere in the food chain, including agricultural inputs, food manufacture, transport, storage, distribution, refrigeration and packaging. Home use of energy for cooking is also significant.

The external cost of food transport has been estimated at between £1.9 billion and £4 billion, with social costs from congestion, accidents, greenhouse gas emissions, air and noise pollution, and infrastructure wear and tear.<sup>69</sup> HGV transport is estimated to contribute 45% of the carbon dioxide emissions from food transport, air and sea approximately 13% each, and consumer car food shopping 21%.<sup>70</sup> Between 1992 and 2005, urban food vehicle-kilometres (km) increased by 27%, due largely to an increase in shopping for food by car, which accounts for almost half of all UK food vehicle-km.<sup>71</sup> The rise in urban food vehicle km has been driven by an increase in car ownership, together with changes in shopping patterns away



**Figure 5** Food consumption-related UK greenhouse gas emissions

Source: Food Climate Research Network (2007). Adapted from figures for overall UK consumption-related GHGs (work in progress).

from frequent use of local shops towards less frequent use of out-of-town supermarkets.

The Stern Review<sup>72</sup> concluded that the benefits of strong and early action to mitigate climate change far outweigh the economic costs of not acting.

The costs and impacts of inaction are equivalent to losing between 5% and 20% of global GDP each year, against a projected cost of action to avoid the worst impacts of climate change of 1% global GDP per year.

# What is government's current approach?

The UK government is committed to reducing greenhouse gases to 12.5% below 1990 levels by 2008-12 in line with its Kyoto Protocol commitment, and additionally to reducing carbon dioxide by 60% on 1990 levels by 2050.<sup>73</sup> It is proposed these targets are enshrined within the Climate Change Bill,<sup>74</sup> making the UK the first country to have a legally-binding long-term framework to cut carbon

emissions and adapt to climate change. Government has yet to respond to international scientific consensus that an 80%, rather than 60%, reduction by 2050 is needed.<sup>75</sup>

The UK's climate change targets apply across the devolved nations, but Scotland and Wales are also developing their own targets in addition to their responsibilities to meet the UK-wide commitments.

### **Key policies and initiatives include:**

- EU's Energy Trading Scheme (EUETS) for major users of energy such as power stations and transport<sup>76</sup>
- Voluntary Climate Change Agreements (CCA)<sup>77</sup> between industry and Government for CO<sub>2</sub> reduction up to 2013, cover parts of the food supply chain, including bakeries and rotisseries in supermarkets. The commercial cold-storage sector has a CCA to reduce energy use by 12% from 2005 to 2011. This includes 'refrigeration' businesses but not refrigeration in supermarkets or regional distribution centres (RDCs)
- Proposed Carbon Reduction Commitment<sup>78</sup>
   emissions trading to cut emissions from
   medium-sized energy users, including major
   retailers' energy use in stores and RDCs;
   currently at consultation stage as part of the
   Climate Change Bill
- Energy Performance in Buildings Directive will require buildings from 2008, to undergo an energy rating at point of sale or rental, which must be displayed in public buildings and those frequented regularly by the public, including supermarkets<sup>79</sup>
- Embedded greenhouse gas emissions: government sponsorship of BSI standard for methodology and metric for accounting for emissions in food and non-food products throughout their life cycle<sup>80</sup>
- Defra programme on climate change and agriculture, including: supporting the Rural Climate Change Forum, through research and communications to farmers about emissions reductions from the land use sector, and research into market mechanisms for mitigation; research and policy development to support anaerobic digestion<sup>81</sup>

- A European phase out of the use of hydro-chlorofluorocarbons (HCFCs) in refrigeration systems begins at the end of 2009. HCFCs are ozone depleting substances, which have been used as alternatives to chlorofluorocarbons (CFCs), which were banned in 2000. Refrigeration equipment also contains hydro-fluorocarbons (HFCs), a type of F-Gas, which are potent greenhouse gases with a very high global warming potential. A European regulation aimed at decreasing the emissions of F-Gases came into force in July 2007.
- Food Industry Sustainability Strategy: Voluntary targets for greenhouse gas emissions reductions of 20% (on 1990 levels) by 2010<sup>82</sup>
- Defra product road-maps for 'milk'<sup>83</sup> and forthcoming on 'meat'<sup>84</sup>
- Market Transformation Programme (furthering development and uptake of energy efficient technologies)<sup>85</sup>
- Carbon Trust initiatives on carbon reduction management<sup>86</sup> and carbon labelling<sup>87</sup>
- Sustainable Distribution Strategy (DfT) 1999,<sup>88</sup>
   and DfT's Freight Best Practice Programme<sup>89</sup>
- Vehicle Excise Duty and fuel taxes affect freight and distribution<sup>90</sup>
- Planning Policy Statement 1: Delivering Sustainable Development<sup>91</sup>
- Planning Policy Statement 6: Planning for Town Centres.<sup>92</sup>

The Office of Climate Change (OCC) was set up in 2006 to be the central cross-departmental source of analysis and evidence on climate change related issues, for use by all government departments in their policy development.<sup>93</sup> Its remit includes promoting

understanding of climate change across government and supporting departments in adapting their policies. The new statutory Committee on Climate Change, proposed within the Climate Change Bill will hold the government to account on its progress towards climate change targets. The SDC's own role as advisor and watchdog of government's progress on achieving sustainable development is also part of this landscape.

Despite the guiding sustainable development framework of Planning Policy Statement 1, there has been a strong emphasis in recent planning policy documents on productivity rather than sustainability. The removal of perceived barriers to economic growth has become a priority. The 2007 Planning White Paper<sup>94</sup> suggests that planning policies designed to restrict growth in out-of-town retail developments act as a barrier to growth. The subsequent intended review<sup>95</sup> of all Policy Planning

Statements opens up the possibility that existing town centres will fail to be identified as the preferred locations for new retail stores, as is currently set out in Planning Policy Statement 6. SDC is concerned this could lead to greater personal car use.

Defra is currently working with the Carbon Trust and the British Standards Institute to develop a methodology and metric for measuring greenhouse gas impacts of products and supply chains across their life cycle. This potentially will enable retailers to work with supply chains to reduce impacts, inform consumers of the greenhouse gas impacts of products, and choice edit products to help consumers make greener choices.

# **Targets**

#### International commitments:

- Kyoto Protocol commitment to reduce greenhouse gas emissions by 12.5% over the period 2008-12, from baseline 1990 level<sup>96</sup>
- EU phase out of HCFCs (refrigerant gases) by 75% by 2010 and 90% by 2015 with final phase out in 2020.<sup>97</sup> EU F-Gas Regulation requires controls on equipment containing HFC refrigerant gases.

# **UK** domestic targets:

- Reduce carbon dioxide emissions by 20% by 2010<sup>98</sup> and 60% by 2050, from 1990 level<sup>99</sup>
- FISS voluntary target for food industry to cut emissions by 20% by 2010; industry says this is achievable if existing technologies and best practice are more widely applied.<sup>100</sup>

# Retailers' action

Retailers themselves also see climate change as a key area of concern for their businesses, having rapidly risen up the consumer agenda in recent months.<sup>101</sup>

Individual retailers have made commitments to greenhouse gas reductions, including carbon neutral commitments (Marks and Spencer, Asda and Co-op) and 50% reduction in in-store and regional distribution centre (RDC) energy use by 2020 (Tesco).

There is a move towards greater efficiency in transport and distribution, including making some shifts from road to rail. 102 Most of the large retailers

are now investing in and/or sourcing renewable energy and developing model green stores.

Others have made commitments to reducing air-freight, and Marks and Spencer and Tesco are labelling air-freighted produce. Tesco is also working with the Carbon Trust to map the carbon footprint of thirty products, including tomatoes, potatoes and orange juice utility with the ambition of introducing carbon labels for all its own-brand products.

Some of the larger supermarkets have collaborated with other retailers to make a joint response to the Stern Review.<sup>105</sup>

# Gaps and challenges

of all the challenges linked to a sustainable food system, our stakeholder research found climate change to be the issue that most required strengthened government policy intervention. In particular, industry is looking to government to set a stable agenda so that it can plan for the future and make the necessary investment and changes to their business in a logical and progressive way.

Our mapping work supports the view that government policies as they relate to supermarkets and the food chain are fragmented and complex. In particular:

- The policy framework for climate change as it relates to the food chain is weak and disconnected. Climate Change Agreements (CCAs), 107 up to 2013, cover parts of the supply chain, including bakeries and rotisseries in supermarkets, but energy used in refrigeration of products on sale is not covered. The Carbon Reduction Commitment (CRC), under development as part of the Climate Change Bill, will establish a trading system to stimulate improved energy use in buildings, including supermarket stores and warehouses. But it is as yet unclear how CCAs and the CRC will fit together. The CRC, if implemented, would only cover in-store energy use, and there is no updated strategy for reducing emissions from freight or embedded GHG throughout the supply chain. BERR is undertaking a simplification review due to report by the end of 2007. The SDC considers there are more efficient ways of achieving emissions reductions than through the current model of three separate schemes. We also propose energy and transport policies to link as part of economy-wide emissions reductions
- The F-Gas Regulation introduces measures on managing refrigeration equipment and preventing leakage of HFCs and other F-Gases, but there is no requirement to phase out their use. Alternatives such as hydrocarbons and non-HFC coolants are starting to be used by industry,<sup>106</sup> but there is no policy mechanism to support a phase-out of HFCs, and to support efficient development and design of systems using alternatives.

There is also further work to be done to explore options for reducing the refrigeration dependency of the food system.

- The Department for Transport's Sustainable
  Distribution Strategy dates back to 1999,<sup>108</sup>
  and relies on disseminating best practice in
  the absence of any hard policy mechanisms.
  Research carried out on behalf of Defra,
  points to a lack of policy drivers, investment
  and infrastructural upgrades for modal shift<sup>109</sup>
- The Energy Performance in Buildings Directive will require buildings to undergo an energy rating at sale or rental. Whilst this may be a driver for those retailers where sustainability is important to their corporate reputation and brand, for others it is likely to be an insignificant driver
- The Food Industry Sustainability Strategy (FISS) made only voluntary commitments up to 2010, with no joint government and industry commitment to a 60% reduction by 2050. In its response to the FISS, the industry says the 60% target cannot be achieved by "business as usual" on energy efficiency. 110 This identified a number of barriers to more carbon efficient food industry operations, including lack of assurance that investment incentives will be maintained, management barriers, and barriers to implementing and sharing best practice. Efforts to mitigate climate change from transport are hindered by government planning and transport planning policy, which facilitates greater car use at the expense of active and sustainable travel (i.e. walking, cycling and public transport). SDC is concerned that the proposed secondary reforms to the planning system, as outlined in the Planning White Paper, may allow for more out-of-town retail developments, leading to an increased need for transport, particularly personal car use.

In a 2007 report on governance for climate change, the Environmental Audit Committee (EAC) concludes that current institutional frameworks for dealing with climate change are confused and do not promote effective action on reducing emissions.<sup>111</sup>

### **Recommendations**

- Defra and BERR to work with the food industry to develop a strategic plan for greenhouse gas emissions reductions across whole food supply system through to 2020; these 2020 targets to support UK trajectory for at least 60% cut in CO<sub>2</sub> emissions by 2050
- Defra and BERR to develop policy scenarios for meeting 2020 emissions goals, with roadmapping approach to identify policies to achieve sector emissions reductions
- The proposed Defra/BERR 2020 strategic plan to include contribution the sector could make from emissions reductions from own operations (including buildings, refrigeration, transport)
- Defra to work with the farming and food supply chain to develop a long term vision for reducing greenhouse gas emissions from farming and how this fits into the 2020 strategic plan

- Defra to implement policies for tackling methane production and nitrates pollution from intensive farming. Lessons to be learnt from the implementation of the Nitrates Directive and Nitrates Vulnerable Zones to be developed into broader policy approach to reduce total nitrates input
- Defra to implement policies to support farmers and the food supply chain in finding appropriate solutions to agricultural waste and food waste, including the use of anaerobic digestion
- Defra to communicate a clear timetable for phasing out HCFCs in refrigeration by 2015, to support development of alternatives to HFC refrigerants (including hydrocarbons), and to advise the supply chain on replacements to HCFCs and HFCs.

### **DfT to develop:**

- Further incentive structures to support increased use of rail freight by supply chains
- Further promotion of lower-carbon transport technologies (such as hybrid trucks)
- Improved accreditation and labelling for the Renewable Transport Fuels Obligation (RTFO) so genuinely sustainable biofuels (use of waste oils) are encouraged.

### CLG to:

 Maintain current ethos of Planning Policy Statement 6 giving planning priority to intown store developments.

### **CLG and DfT to:**

 Encourage local transport policies (through Sustainable Community Strategies, Local Development Frameworks and Local Area Agreements) to support the provision of bus routes, safe cycle lanes and walk-ways to shopping centres, both in-town and existing out of town shops, through the 2008-11 funding period.



### 4.2.2 Waste

### What is the issue?

Waste, the means of minimising its production, and the methods of treating it, is a major issue for the UK as a whole. Around three-quarters of the UK's municipal waste ends up in landfill (generating greenhouse gas emissions), one of the worst records in Europe; across the whole of the EU, only Greece and Portugal achieve worse. The project we are concentrating on the role of supermarkets in both encouraging waste through their packaging and marketing activities, and in their role as the packaging specifiers who could reduce waste and increase recycling opportunities.

Food retailers have a significant impact on the waste stream though transit and product packaging, point of sale packaging (including carrier bags), food waste from products past their sell-by-date, and promotions and price signals to consumers that encourage food waste, e.g. 'buy one get one free' offers. Consumers are often faced with overpackaged supermarket products, and it has been assessed that up to 40% of the packaging in an average shopping basket cannot be recycled. 113 Within UK homes each year, 5.2 million tonnes of food-related packaging waste and 6.7 million tonnes of food waste are generated - equivalent to 15 million tonnes of CO<sub>2</sub>. 114 Six million tonnes of this waste ends up in landfill which generates the potent greenhouse gas, methane (21 times more powerful than carbon dioxide). Retailers are estimated to directly generate 1.6 million tonnes of food waste.115

Waste not only has an environmental impact, it also has a monetary impact. The value of 'edible' waste is calculated at £250-£400 a year per household<sup>116</sup> and the overall retail value of the food waste that goes to landfill is calculated to be £6 billion per year.<sup>117</sup>

Stakeholders in our research<sup>118</sup> recognised that supermarkets are focusing more on encouraging recycling, but wanted to see retailers doing more to reduce packaging and waste, and to use more biodegradable and compostable packaging. Retailers however, complained that the variation in recycling facilities across the country and the confusion and patchy collection of compostable waste, made this difficult.

The amount of food packaging and the difficulty of recycling much of it rates highly as a public concern. The Waste can be the "wedge" issue that alerts consumers to a sustainability problem, and stimulates them to act more sustainably – through increased recycling for example. Carrier bags illustrate this effect. Single use carrier bags are only a small part of the waste stream but they have become an icon of unnecessary waste of resources. Each year, supermarkets give out 17.5 billion plastic bags and until recently, 80% of consumers put most items into free plastic carrier bags supplied at supermarket check-outs. While some of these are used for various purposes in the home, they are rarely used for repeated shopping trips.

# What is government's current approach?

UK waste policy sits within a wider legislative and policy framework set by the European Union, which drives UK policy to reduce waste to landfill. Current strategies on waste issues across the UK are:

 The Waste Strategy for England,<sup>122</sup> published in 2007, committing government and local authorities to increase household recycling rates and reduce waste to landfill. This Strategy also gives Local Authorities the option to introduce variable household charging, and commits to increase diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and non-municipal waste. The Courtauld Commitment targets (see below) were adopted into the strategy.

The Courtauld Commitment is a UK-wide voluntary agreement between the government, the Waste and Resources Action Programme (WRAP), government's arms-length delivery body on waste, and thirteen retailers. 123 It is the main instrument for reducing the retail sector's contribution to waste and improving resource efficiency.

Government's long-term vision, was expressed in a major speech by Prime Minister Gordon Brown in November 2007, where he set out his aspiration of eliminating single use disposable bags in favour of longer-lasting and more sustainable

alternatives.<sup>124</sup> Government will convene a forum of the supermarkets, the BRC and other interested organisations to work together on reducing single-use carriers.

# **Targets**

- EU Landfill Directive requires by 2020 that biodegradeable municipal waste has fallen to 35% of that produced in 1995<sup>125</sup>
- EU Packaging and Packaging Waste Directive obligates the UK to meet targets for the recovery and recycling of packaging waste<sup>126</sup> by end of 2008
- 2007 UK Budget announced an increase in the landfill tax escalator so that the standard rate of tax for local authorities will increase by £8 per year from 2008 until at least 2010/2011<sup>127</sup>
- The Producer Responsibility Obligations (Packaging Waste) Regulations 2007<sup>128</sup> require certain businesses which handle packaging, <sup>129</sup> including retailers, to recover specified tonnages of packaging and certify this through Packaging Recovery Notes (PRN)
- Packaging (Essential Requirements)
   Regulations 1998<sup>130</sup> specify requirements including design and use of packaging that permits its reuse and recovery; and minimisation of packaging volume and weight, consistent with the level necessary for safety, hygiene and acceptance by the consumer

- Courtauld Commitment sets voluntary targets for retailers of:
  - 25% reduction in environmental impact of carrier bags by 2008,
  - absolute packaging reductions by 2010,
  - finding solutions to food waste
- WRAP's food waste campaign aims to reduce consumer food waste by 100,000 tonnes by March 2008<sup>131</sup>
- Waste Strategy for England sets targets to:
  - Recycle or compost 40% of household waste by 2010, 45% by 2015, 50% by 2020
  - Recover<sup>132</sup> 53% of municipal waste by 2010, 67% by 2015, 75% by 2020
  - Reduce the amount of household waste not re-used, recycled or composted from 22.2 million tonnes in 2000 to 15.8 million tonnes in 2010
  - Reduce GHG emissions from waste management by 9.3 million tonnes CO<sub>2</sub> per year compared to 2006.

### **Retailer action**

Many of the larger retailers have strategies for reducing the environmental impact of waste and improving resource efficiency. Thirteen grocery retailers have signed up to the Courtauld Commitment, and are working with WRAP on their own implementation plans, and research and demonstration projects into packaging optimisation and reducing household food waste. <sup>133</sup> There have been a range of individual retailer initiatives, for

example, Co-op introduced biodegradeable carrier bags in 2002; Marks and Spencer have conducted a trial charge on plastic bags in Northern Ireland; Tesco awards 'green' clubcard points for re-using bags; and Sainsbury's use biodegradeable packaging for organic produce.

Some have also set absolute targets on waste to landfill e.g. Asda has committed to zero waste to landfill by 2010, Marks and Spencer by 2012,

Morrisons to reduce by 50% by 2010, Sainsbury's to 50% by 2010, and Waitrose to 75% by 2012. 134

SDC welcomes the initiatives of retailers and recognise many of the targets are challenging. While it is too early to evaluate these, our research with stakeholders shows that retailers are perceived to

be taking action on packaging and waste, primarily through recycling.<sup>135</sup> Stakeholders perceive retailers to be driven by the ability to make financial savings, by the high visibility of packaging with consumers and its fit with government policy.

# What are the gaps and challenges?

The UK holds one of the poorest records in Europe on waste, and we believe that current policies to reduce waste production, reduce waste to landfill and to increase recycling and composting are insufficient to achieve the required step-change towards sustainable use of resources and materials efficiency.

We conclude there are weaknesses in the UK's current implementation of packaging legislation:

- Recycling provisions of the Packaging
   Directive have not put high enough costs on
   producers to force them to rethink product
   design.<sup>136</sup> The cost of Packaging Recovery
   Notes (PRN) is minimal compared to other
   business costs. Retailers have told the SDC
   that PRNs are centralised as a financial cost,
   and are an insufficient incentive to 'design
   out' waste or specify for improved material
   efficiency
- The Packaging (Essential Requirements)
   Regulations have failed to drive waste
   minimisation as they are 'vague, self monitored and poorly enforced'.<sup>137</sup>
   Stakeholders surveyed by the SDC believe
   the Essential Requirements are compromised
   by ambiguity and lack of enforcement.
   The language and interpretation of
   'consumer acceptance' in the regulations
   is also problematic, as it can be used by
   manufacturers or retailers to argue that
   excessive packaging is justified
- Implementation of the Producer Responsibility Obligations is too weak as the costs of monitoring compliance are a barrier to enforcement<sup>138</sup>
- Targets are weight-based, and do not incentivise recycled content and re-use<sup>139</sup>

- Enforcement of the regulations in Trading Standards is minimal as these are not targeted as a national priority, so do not translate into local priorities
- There is a lack of consistency across local authority waste streams, making it difficult for manufacturers and retailers to use packaging materials which can be uniformly recycled/composted.

The Waste Strategy for England 2007 has an over-riding emphasis downstream and post-consumer, on recovery and recycling, rather than tackling the problem further upstream in the supply chain. Whilst re-use, recycling and composting are important, to achieve long-lasting improvements in resource efficiency will require a mix of better product design, producer responsibility, recovery and investments in infrastructure.

Historically, the Landfill Tax has not been set high enough to stimulate the required investment in sustainable waste management infrastructure needed by local authorities. The Public Accounts Committee's report on the Landfill Directive found that government has been slow to implement the Directive, resulting in the UK making less progress than much of the rest of EU.<sup>140</sup> SDC welcomes the announcement in the 2007 Budget of an acceleration in the landfill tax escalator to a £8/tonne increase every year, but the delay in setting a high enough rate to change behaviour has prolonged reliance on landfill.

Despite current retailer activity we conclude that there is considerable scope for further action. Most are yet to tackle food waste amongst consumers, and in-store, there is little commonality of recyclable packaging across product lines, and messages to consumers are mixed.

Courtauld Commitment has been successful in getting businesses engaged with a range of waste but its targets now look unambitious

and lack urgency, in response to the scale of the waste challenge and compared to some retailer commitments and government expectations, for example, towards carrier bags and food waste. The target for absolute packaging waste reductions is not until 2010, with the unambitious aim of a decrease in the rate of growth for every year until then. There is no indication of what action government will take should retailers fail to meet these voluntary targets. Further, despite the significant scope to reduce the amount of food waste currently sent to landfill, food waste has been excluded from any specific targets in Courtauld or the Waste Strategy.

Better co-ordination with retailers and stronger targets could achieve greater and more immediate reductions in resource use, packaging and food waste. SDC considers government should adopt a more aspirational approach to reducing waste in food retail by setting longer-term targets and introducing enablers to support a culture of zero waste.

As the LGA research shows<sup>141</sup> much current packaging cannot be recycled. There is lack of clarity over preferable materials for compostable packaging and their appropriate recovery streams, and what materials can be composted in the home or via municipal food or green waste collections.<sup>142</sup> Retailers in our survey also complained about the array of different recycling models across the UK, and the confusion and patchy collection of compostable waste.<sup>143</sup> We also consider government needs to be clearer on how composting and anaerobic digestion can be a part of sustainable waste management by local authorities.

There is evidence that many consumers understand the need to reduce waste from packaging and from food, 144 and make the link to their own behaviour. This could act as a bridge to wider environmental behaviour goals. The SDC does not believe that government is currently taking full advantage of this.

### **Recommendations**

- Defra Waste Strategy to be followed by a Packaging Strategy, developed with BERR, WRAP, manufacturers, producers and retailers to set out a clear ambition, and to identify policies and measures for:
  - reducing packaging waste at source, avoiding reliance upon downstream recovery and recycling
  - encouraging efficient use of compostable packaging, including clarification of the role of compostable packaging, labelling, and the most environmentally preferable way to deal with it post-consumer
  - ensuring the necessary long-term waste treatment infrastructure is in place
  - achieving progress towards closed loop recycling and materials systems in business.
- Defra and DA government departments, the Environment Agency and SEPA to develop proposals for stronger and more effective implementation of Producer Responsibility Regulations and Packaging (Essential Requirements) Regulations, to ensure delivery. To include clarification of the ambition for packaging waste reduction and how these regulations can deliver

- Defra to convene consumer groups to identify ways of improving sustainable management of waste, such as testing the 'consumer acceptance' aspect of packaging in the Packaging (Essential Requirements) Regulations
- Defra to work with local authorities and devolved administrations to improve consistency of recycling and composting schemes across England, Wales, Scotland and Northern Ireland
- Defra and BERR to develop proposals for legislation, to ensure that voluntary agreements such as Courtauld could be enforced if they do not deliver
- BERR and DIUS to support innovation for designing out waste, through WRAP where appropriate e.g. an innovation platform and demonstration and venture capital support for innovative ideas that struggle to come to market.



### 4.2.3 Water

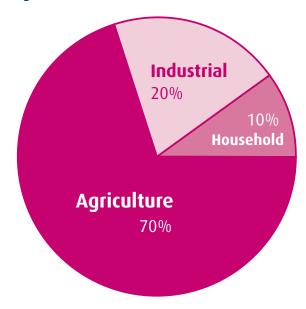
### What is the issue?

Historically, water has been considered a low-cost resource, in comparison to other raw materials<sup>145</sup> and has received less attention than other resource issues such as energy. Now, climate change, greater demand from competing interests and closer regulation of water supply are increasing the cost and scarcity of water. This is focusing attention not just on the food industry's direct use of water but also the amount of embedded water in products – the water used in production and processing. For example, it has been estimated that it takes from 13 litres of water to produce a 70g tomato to 200 litres of water for a 200ml glass of milk and 2400 litres of water to produce a 150g hamburger.<sup>146</sup>

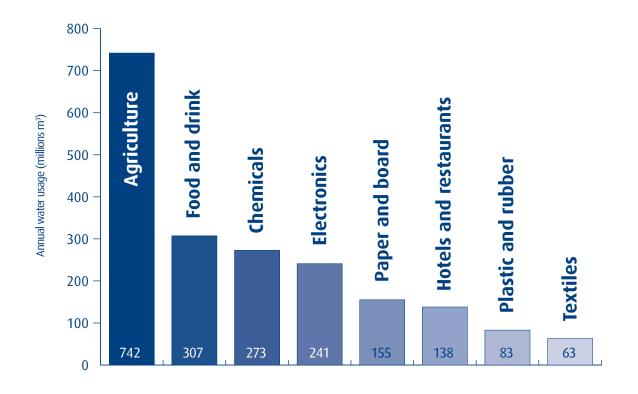
Globally, agriculture is by far the biggest user of water, accounting for 70% of global water use (see Figure 6).<sup>147</sup> Large-scale irrigated agriculture in areas where there is high competition for water, and low rainfall, can cause depletion of groundwater, intrusion of seawater (high salinity), water and soil contamination by pesticides and fertilisers, soil degradation and loss of inhabitable land.<sup>148</sup>

In the UK, agriculture and the food industry are the sectors using the highest amount of water.<sup>150</sup> Agriculture accounts for 742 million m<sup>3</sup> of water, and food and drink 155 million m<sup>3</sup>.

**Figure 6** Global water use<sup>149</sup>



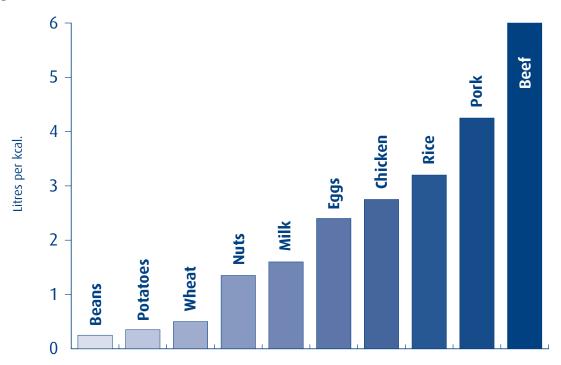
**Figure 7** UK water use by sector<sup>151</sup>



The amount of water used in the entire process of producing a product, termed embedded water, is a major sustainability issue for the food system. The Food Industry Sustainability Strategy addresses the amount of water used by companies in their operations, but does not include embedded water in products. For this review we are focusing on

government's role in supporting supermarkets as they begin to consider the sustainability issues concerning embedded water, how the evidence base needs to be translated into useable information for developing product whole life cycle assessments of water consumption, and turning this information into a usable standard.

Figure 8 Water embedded in food



Source: Waterwise (2007). Hidden waters: embedded water and our true consumption.

Figure 9

The average UK citizen drinks between two and five litres of water a day, and uses approximately 145 litres for cooking, cleaning, washing and flushing. 152 When embedded water is taken into account, the daily use per person is nearer 3400 litres. 153 Approximately 65% of this is embedded water in food, equivalent to over 2,000 litres per person per day (see Figure 9). The impacts of embedded water in products are global, due to the globalised nature of our food system.

Research carried out for Defra has identified the four most significant water-using sub-sectors of the industry to be meat processing, fruit and vegetable production, dairy and beverage manufacture.<sup>154</sup>

Embedded in industrial goods 30.6%

Embedded in food 65%

UK water consumption

Source: Waterwise (2007). Hidden waters: embedded water and our true consumption.

Water use also contributes to climate change as the water industry is energy intensive, consuming approximately 3% of total energy used in the UK,<sup>155</sup> used primarily to treat wastewater and provide drinking water treatment.<sup>156</sup> Improving water quality standards, driven by policy levers such as the Water Framework Directive, has a direct correlation with energy consumption.<sup>157</sup>

# What is government's current approach?

There are two aspects of sustainable water management:

- water quality e.g. water pollution from agriculture and discharge from manufacturing,
- water consumption, from abstraction, use of public water supply, and the origin and amount of embedded water in products.

# Water Quality in the UK

Key legislation and initiatives:

- EU Water Framework Directive, on the quality of water bodies,<sup>158</sup>
- EU Implementation of Nitrates Directive<sup>159</sup>; identification and monitoring of Nitrates Vulnerable Zones, designated in 2002 covering 55% of England,
- Water Act 2003 (England and Wales) –
  including water resources management,
  abstraction licensing, water conservation and
  trade effluent consents,
- A Water Strategy for England is expected in 2008; to cover water quality in the environment, water supply, water demand management and efficiency, regulatory framework, and climate change adaptation and management,
- Ofwat regulates water prices.

### **Water consumption**

Strategies and other initiatives:

- Water Act 2003 and the forthcoming Water Strategy for England expected in 2008,
- FISS focus on operational water use,
- FISS action plan also states that retailers and manufacturers should aim to reduce embedded water in the products they source,<sup>160</sup>
- DFID supports organisations promoting the sustainable use of water in agricultural regions of Sub Saharan Africa, such as the Water and Sanitation for Urban Poor Alliance, which works with communities around Lake Naivasha in Kenya.

# **Targets**

- FISS contains a voluntary target for the food industry to reduce its direct water usage by 10-15% (and 20-25% in the South East) by 2020 (baseline to be determined)<sup>161</sup>
- The industry-led action plan which followed the publication of FISS recommends a uniform target of 20% reduction by 2020 (baseline to be determined).

# **Retailer action**

Retailers were represented on the FISS champions group for water which agreed a target of 20% reduction by 2020 from the baseline (which is yet to be determined). The main focus has been to reduce water use in their own operations. For example, Marks and Spencer has plans to reduce water use in stores and offices by 20% by 2012; Morrisons 15% reduction by 2010; Sainsbury's 50% by 2009; Tesco 15% reduction by 2009; and Waitrose has already reduced water use by 28% in 2006/7 compared with the previous year. The Food and Drink Federation which represents food

manufacturers has pledged to achieve significant reductions in water use (excluding that embedded in products), contributing to the FISS target of 20% reduction by 2020.<sup>165</sup>

So far, there has been very little focus on embedded water in products. However, recent feedback we have received from the industry implies that the progress with developing carbon standards for products (being developed by the BSI, with government and the Carbon Trust) has stimulated interest in developing a similar standard for embedded water.

# Gaps and challenges

The policy debate around water use in the food system has garnered less attention than other resource issues such as energy. One of the barriers to implementing and monitoring water-saving initiatives is the lack of data collection, 166 and we believe this is an area where government should have a significant enabling and convening role, so the evidence base can be developed.

The FISS action plan is a voluntary initiative relying on companies making public their water consumption rates as part of Corporate Reporting – but this has been an insufficient driver so far. As the Report of the Champions' Group on Water notes, there is insufficient data collected across the food and drink industry to establish a baseline for water use.<sup>167</sup>

Although the FISS Champions' groups calls on companies to reduce embedded water, the FISS water reduction target proposed by the Champions' Group explicitly excludes "water that forms part or all of the product", and refers only to water used in a company's operations. 168

Defra's anticipated 2008 Water Strategy for

England is the opportunity for government to support improved information collection about embedded water use through the food system, identify 'hotspots' of high water use to be targeted for change, and set targets for reductions in consumption across the food system. By leading a process of water use data collection, benchmarking, and developing the methodologies for auditing embedded water, government could make significant progress in developing targets, milestones and standards for embedded water, in the same way that is being developed for embedded carbon in products.

There is a strong policy focus on improving water quality associated with agricultural practice. Much of this stems from European Directives, such as the Water Framework Directive and the Nitrates Directive; however, their success depends upon effective implementation by Defra, the Environment Agency and the devolved administrations. To improve the sustainability of agricultural production, systems need to adopt improved crop water-use efficiency, reduce diffuse pollution and adopt river-basin wide approaches.

### **Recommendations**

- Reduction in water use to be given a high priority in Defra's definition of, and support for, a sustainable food and farming system in the Farming for the Future programme
- As part of the 2008 Water Strategy, Defra to work with industry and retailers across the food production, processing and retailing system to:
  - with BERR, lead progress on water data collection within industry, to establish benchmarking of water consumption
  - lead development of research methodologies for auditing embedded water (building on Life Cycle Assessment, such as for carbon)

- analyse the levels of embedded water for a broad range of different products and identifying 'hotspots' of embedded water
- with BERR, to set targets for water consumption reductions to be achieved across the food production and processing sectors, with particular emphasis on how action to reduce use in the highconsuming products and processes will contribute to the overall targets
- with industry, to use the product roadmap stepped approach for exploring technical and policy options for reducing levels of embedded water in hotspot products and processes.



# 4.2.4 Ecosystems

### What is the issue?

Sustainable food production is dependant on the health of farmland, forests and fisheries ecosystems, yet according to the United Nations, approximately two-thirds of the world's ecosystems are being degraded or used unsustainably. Globally, more land had been converted to cropland in the 30 years after 1959 than in the 150 years between 1700 and 1850. Most at threat are forest land, wetlands and coastal areas. Agriculture's impacts on the natural environment in the UK and elsewhere are significant. 171

As procurers of food products, supermarkets with their enormous buying and selling power, need to acknowledge their responsibility for the sustainability of the products they sell. With its international and national commitments to protecting habitats and biodiversity, government needs to be acknowledging and tackling sources of unsustainable production.

Globally, the demands of the modern food system are leading directly to ecosystem degradation, including:

- Deforestation of primary rainforest to plantations e.g. for palm oil, an ingredient which is found in one in ten products on supermarket shelves and also increasingly used in biofuel production<sup>172</sup>
- Indonesian exports of palm oil have increased by 244% in past seven years, and as much as 87% of deforestation in the Malaysia between 1985 and 2000 is due to palm oil, destroying 0.7% of its rainforest every year and reducing the habitat of the orangutan,<sup>173</sup>
- Loss of mangrove forests driven primarily by aquaculture development, deforestation and freshwater diversion<sup>174</sup>
- Three-quarters of the world's fish stocks are fully, over or significantly exploited<sup>175</sup>
- Widespread soil degradation, including erosion, compaction, nutrient depletion and salinisation. Agriculture depends on soil quality but large areas of productive land have been degraded by human activity and intensive farming methods.<sup>176</sup>

In addition to environmental impacts, land use change for monoculture agriculture has implications for the livelihoods and rights of local communities.

In the UK, public benefits accrued from agriculture include recreation and amenity value of landscapes and biodiversity, in addition to carbon sequestration value and contribution to rural economies and communities.

However, the negative impacts of agriculture in the UK are significant. The external environmental and health costs of agriculture in the UK have been estimated to be approximately £1.5 billion per year, including £150 million from losses of biodiversity and landscape value.<sup>177</sup> The same study calculated that were the UK to be farmed under organic production systems, costs of biodiversity and landscape losses would fall by 75% for wildlife and 90% for hedgerow losses, with a total cost-avoidance of £1.1 billion compared with current agricultural systems.

The UK Biodiversity Partnership latest review of indicators (2007)<sup>178</sup> shows that:

- Trends in farmland birds show no overall change since 2000, but a long-term decline (since 1970)
- Area of agri-environment land is improving since 1992
- Sustainability of fisheries is improving since 1990
- Area threatened by acidity is improving since 1996
- Area threatened by nitrogen has been improving from 1996, but shows no overall change since 2000.

# What is the current government approach?

Government is signed up to a number of international and EU commitments, including:

- UN Convention of Biological Diversity
- EU Pesticides Directive
- EU Habitats Directive
- EU Water Framework Directive
- Forthcoming EU Soils Directive
- EU CAP Reform decoupling and likely future reduction in Single Payment Scheme; cross-compliance
- EU Common Fisheries Policy
- EC Council Regulation 2092/91 on Organic Production.

Agriculture is a devolved matter, although certain aspects of domestic agricultural policy are common across England, Scotland, Wales and Northern Ireland. For example, all nations are committed to CAP reform, and to common minimum legal standards of agricultural production, including pesticide use, organic production standards and animal welfare. Natural England and the devolved administrations deliver agri-environment schemes and advice to farmers.

UK and England agricultural, biodiversity and ecosystems policies and initiatives include:

- Sustainable Farming and Food Strategy (2002): includes stimulating organic and more environmentally sensitive forms of production<sup>179</sup>
- SFFS Forward Look (2006): agriculture contributing a net positive environmental benefit to society<sup>180</sup>
- Rural Development Programme for England 2007-2013<sup>181</sup>
- UK Biodiversity Action Plan 1994,<sup>182</sup> launched as a response to the Convention on Biological Diversity
- Conserving Biodiversity: the UK Approach (2007); the UK biodiversity framework<sup>183</sup>
- Defra's Ecosystem Services Approach Project<sup>184</sup>
- Working with the grain of nature: a biodiversity strategy for England 2002<sup>185</sup>
- Fisheries 2027: A long-term vision for sustainable fisheries.<sup>186</sup>

# **Targets**

# International

- Convention on Biological Diversity 1992: achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level
- EU Gothenburg agreement 2001: halt the loss of biodiversity by 2010.

The UK Biodiversity Action Plan<sup>187</sup> includes commitments to:

- Promote further 'greening' of the CAP
- New incentive schemes to encourage environmentally sensitive forms of agriculture
- Support organic farming and encourage more extensive livestock farming in selected areas,
- Includes 391 Species Action Plans, 45 Habitat Action Plans, 162 Local Biodiversity Action Plans – with Habitat Action Plan targets for agriculture for grassland, hedgerows and arable margins, lowland heathland, upland heathland and blanket bog, and limestone pavement, which are reviewed periodically.<sup>188</sup>

### Retailers' actions

Retailers' sourcing policies impact on ecosystem health, land use changes, biodiversity, fisheries and landscape. Civil society partnerships have been created to tackle some unsustainable sourcing practices, for example the Marine Stewardship Council, established jointly by WWF and Unilever, certifies sustainable fisheries. A number of retailers, including Waitrose, Marks and Spencer, Asda and Sainsbury's, have made specific targets for their sustainable fish sourcing.<sup>189</sup>

All major food retailers are members of the Roundtable on Sustainable Palm Oil.<sup>190</sup> Sainsbury's, for example, has announced that all its own label products would contain palm oil only from certifiably sustainable sources from July 2008.<sup>191</sup> A number of retailers, including Sainsbury's and the Co-op,

have responded to customer and NGO concerns by banning a range of pesticides.

Retailers also demand certain baseline standards for production and traceability through assurance schemes such as Red Tractor,<sup>192</sup> Globalgap,<sup>193</sup> and LEAF,<sup>194</sup> a scheme for biodiversity and integrated farm management standards which provides a 'higher tier' standard. For example, all Waitrose British sourced fruit and vegetables are LEAF-accredited.<sup>195</sup> These are voluntary schemes and labels. Some supermarkets have their own standards, such as Tesco's Nature's Choice.<sup>196</sup>

Retailers including Asda, Marks and Spencer, Sainsbury's and Morrisons say they are also increasing the amount of organic food they supply.<sup>197</sup>

# Gaps and challenges

We found little linkage between government intentions to protect biodiversity at a global and local level with the use of retailer power to set dynamic standards and sourcing policies. Government has taken insufficient action to date to address the biodiversity and ecosystem impacts of food products, leaving it largely to NGOs and consumers to put pressure on industry.

Retailers have been patchily pro-active in addressing their supply chains and the impacts of mainstream procurement. There are further opportunities for retailers to choice-edit on behalf of consumers. There is insufficient auditing of produce on sale in supermarkets for their impact on biodiversity and ecosystem health. Only limited auditing is able to be conducted by NGOs and consumer groups, such as Greenpeace<sup>198</sup> and the National Consumer Council.<sup>199</sup>

The food system's impacts upon biodiversity and ecosystem services were a major omission from the Food Industry Sustainability Strategy. Although FISS places a priority on the food industry to improve 'ethical trading', this is defined narrowly as the social issues of fair trade and fair treatment of workers. The FISS Champions Group on Ethical Trade advocates a broader understanding of sustainable sourcing, that incorporates living within the planet's resources, alongside a respect for basic human rights and poverty reduction.<sup>200</sup> The Strategy for Sustainable Farming and Food<sup>201</sup> recognised the key

principle of operating within the biological limits of natural resources, including soil and biodiversity, but the lack of recognition within the FISS suggests that retailers and other players in the food chain do not have a responsibility towards the sustainability of natural resources through the products they source.

Across the UK, farmers receive payments as part of the Common Agricultural Policy (CAP) to maintain their land to certain environmental conditions. 202 Some farmers still receive subsidies for their food products (notably sugar beet) although this will decline after 2013. Total subsidies in England in 2006/7 amounted to approximately £1.5bn/year. In the SDC's view this subsidy should be requiring more demanding environmental standards from farmers, as part of the cross-compliance deal for receiving the subsidy payment. Government is making initial explorations of following the recommendations in SDC's Little Red Tractor report, 2005, where we recommended that a Green Tractor be created, with higher environmental standards than the baseline Red Tractor assurance scheme.<sup>203</sup> The standards in a Green Tractor could be linked to cross compliance payments.

Defra has led on creating a vision for sustainable fisheries<sup>204</sup> but there is a lack of alignment between the current scientific consensus on the sustainability of fish stocks and the Food Standard Agency's (FSA) healthy eating advice for most people to eat more fish.<sup>205</sup> The FSA recommends eating two portions

of fish per week, one of which should be oily.<sup>206</sup> 'At risk' species such as cod are also advocated with no information for consumers on how to avoid these, for example, by choosing certified sustainably-sourced products or recommending alternative species. In 2004, The Royal Commission on Environmental Pollution recommended that the FSA address this issue.<sup>207</sup>

In 2006 the FSA committed to 'take sustainable development into account in all its activities and

policy decisions'<sup>208</sup> and is now considering the sustainability implications for its advice on fish consumption, drawing upon advice from Defra.<sup>209</sup> SDC welcomes this, but would like to see quicker action to amend its nutritional advice, publishing sustainability information for consumers alongside it. This illustrates the need for departmental policies and advice to be aligned with sustainable development objectives.

### Recommendations

### Defra, with industry, to lead:

 Development of improved sustainability standards as the baseline for production standards, i.e. Red Tractor standard to become a 'Green tractor' for domestic food production by the end of 2010; compliance with Green Tractor standard to become a requirement for cross-compliance subsidy receipt.

#### **DFID** to:

 Support producers in developing countries to meet higher standards of sustainability in their agricultural practices (to meet equivalent 'Green tractor' standards/ enhanced GlobalGap standards) by 2009.

### Defra to:

- Jointly publish the evidence-base on ecosystems "at risk" and products in danger of serious depletion or extinction, by the end of 2008
- Align this evidence base with advice to producers, retailers and consumers on the sustainability of products by the end of 2008, and to encourage retailers to "choice edit" more sustainable alternative products.

#### FSA to:

 Work with Defra to align its advice on fish consumption for health with evidence on sustainable sourcing.

#### Defra to:

- Fund (starting in 2008) more research into improved plant/crop strains that require reduced fertilisers and pesticides, and less water, to provide more opportunities for UK adaptation to non-intensive agricultural production
- Ensure that implementation of its Ecosystems Services Action Plan identifies upstream sources of water pollution, and develops the means of reducing pollution inputs.

### By 2009 RDAs and local government to:

Ensure that Defra's Ecosystem Services Action
Plan is implemented across regional and
local areas, to ensure that local ecosystemwide solutions to water pollution and
negative impacts on biodiversity are tackled
effectively.

#### Defra to work with industry in 2008/9 to:

 Convene a Sustainability Forum, furthering its convenor role for FISS, for exchange of information and evidence on sustainability issues in the food sector.

#### **BERR and HMT to**

 Require companies, through their reporting obligations under the Companies Act 2006 (reporting standards are expected to be reviewed late 2008) to report fully and with a defined rigour on their supply chains and their natural resource impacts.



# 4.2.5 Nutrition and obesity

### What is the issue?

Our changing food consumption patterns have major impacts on public health. Increased food availability and poverty reduction over the decades, means the incidence of food related ill-health has changed from under-nutrition in earlier centuries to increased levels of obesity and other diet-related ill-heath including cancer, diabetes, cardiovascular disease, hypertension, allergies and food intolerance today.<sup>210</sup> Obesity is now accepted to be a systemic problem<sup>211</sup> and there are many factors, including food production and consumption, that contribute to this and to diet-related ill-health. The quantity, quality and type of food we buy from our major retailers and the way in which it is marketed and promoted is a crucial part of examining these causes. For example, research within supermarkets shows that healthy eating messages, such as 5-a-day, are drowned out by the larger proportion of adverts promoting highcalorie energy-dense foods.<sup>212</sup> Healthy foods are also perceived to be more expensive. 213

In 2003 the Chief Medical Officer of England described obesity as a "time bomb".<sup>214</sup> The cost of obesity has been estimated at around £3.3-3.7 billion a year,<sup>215</sup> although this is likely to be an

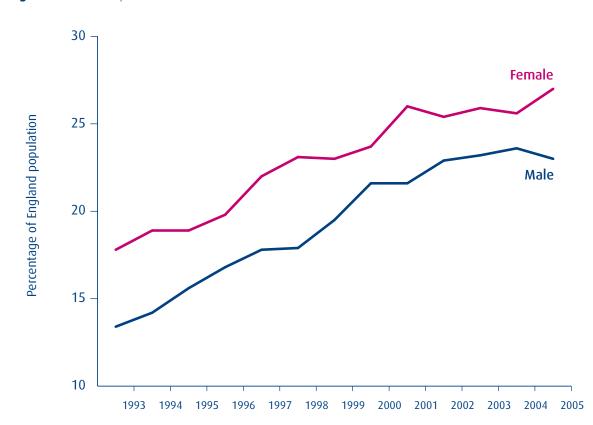
underestimate, and that once the cost of lost earnings is included the figure could be up to at least £10 billion a year. <sup>216</sup> Foresight forecasts that on current trends, the costs of obesity and overweight to the economy will be an annual £50 billion in 2050 at today's prices. <sup>217</sup>

By 2004, according to the Health Survey for England, 23.6% of men and 23.8% of women were obese, <sup>218</sup> with similar figures across the UK.<sup>219</sup>

Weight gain raises the risk of a wide range of diseases including hypertension, coronary heart disease, diabetes, and even ailments such as gallstones and pregnancy complications.<sup>220, 221</sup>

Incidence of childhood obesity is predicted to rise rapidly in coming years. The Royal College of Physicians estimates prevalence of obesity amongst children will be in excess of 50% by 2020.<sup>222</sup>

The National Audit Office in 2001, the Health Select Committee in 2004 and in 2007 the Foresight Obesity review have all pointed to the need for a systemic, wide range of actions to reverse the upward drift in individuals' weight, 223 224 225 actions that would include looking at the food system.



**Figure 10** Obesity 1993-2005

Source: Information Centre 2006. Health survey for England.

# What is Government's current approach?

Following publication of the government's Strategy for Sustainable Farming and Food (2002) the Department of Health undertook to lead the development of a Food and Health Action Plan (FHAP). The intention was to work across government, with the food industry and other stakeholders to establish a coherent and effective programme of activities on nutrition to achieve a healthier diet for people in England.

FHAP was given added priority by the publication of England's public health white paper, Choosing Health (2004),<sup>226</sup> which highlighted the challenges of obesity. In 2004, a Public Service Agreement (PSA) target on obesity was set for 'halting the year-on-year rise in obesity among children aged under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole'. This was shared by the then Department of Health (DH), Department for Culture, Media and Sport

International commitments and national food and health strategies:

- Signatory to World Health Assembly Global Strategy on Diet, Physical Activity and Health (2004)
- WHO European Region First Food and Nutrition Action Plan (2000)
- WHO European Region, Second Food and Nutrition Action Plan (2007-2012)
- Food and Health Action Plan for England (Choosing a Better Diet, 2005).

(DCMS), and Department for Education and Skills (DfES).<sup>227</sup> Choosing a Better Diet: A food and health action plan was published in 2005.<sup>228</sup> It was backed by two Action Plans: Delivering Choosing Health: making healthier choices easier<sup>229</sup> and Choosing Activity: a physical activity action plan.<sup>230</sup>

The Department of Health and the Food Standards Agency have a range of initiatives covering the food retail, manufacturing and food service sectors, to encourage healthier food products and food marketing. This has included initiatives on advertising and marketing of food to children, the introduction of 'traffic light' labelling for foods, a salt reduction strategy and promotion of 5-a-day. In January 2008 the government published a new strategy for tackling obesity, Healthy Weight, Healthy Lives: A Cross-Government Strategy for England (Department for Health/Department for Children, Schools and Families – 2008).

#### Initiatives relevant to retailers:

- 'Signpost' nutrition labelling led by FSA
- Voluntary product reformulation including FSA salt reduction campaign and proposed programme on reducing saturated fat and energy
- Restricting food advertising to children led by Ofcom/DH
- Campaigns to eat at least 5 portions of fruit and vegetables a day – DH led.

### **Targets**

- PSA (2007) on Child Health and Wellbeing: By 2020 to reduce the proportion of overweight and obese children to 2000 levels. (HM Treasury 2007, PSA Delivery Agreement 12: Improve the health and wellbeing of children and young people.)
- The Food Standards Agency has a target to reduce the salt intake of the population to 6q per person per day by 2010
- DH population nutrition intake targets for England:<sup>231</sup>
  - Increase fruit and vegetables to 5 portions a day (from 2.8/day)
  - Increase dietary fibre to 18g/day (from 13.8g/day)
  - Reduce salt to 6g/day (from 9.5g/day)
  - Reduce saturated fat to 11% of food energy (from 13.3%)
  - Reduce total fat to 35% of food energy (from 35.3%)
  - Reduce added sugar to 11% of food energy (from 12.7%).

### Retailers' actions

Retailer initiatives to promote diet-related health have largely been stimulated by pressure from Government (FSA/DH), NGOs and interest from their customers and the media. Actions include:

- Reformulation of products including salt reduction
- Introducing voluntary 'front of pack' signpost labelling
- Reducing the amount of sweets at the checkout
- Supporting the 5-a-day message
- Launching 'healthy' product lines.

All major retailers are now introducing front of pack 'signpost' labelling. Sainsbury's, Asda, Marks

and Spencer, Co-op and Waitrose are, or intend to, use the 'traffic light' system. Tesco, Somerfield and Morrisons are using an alternative system based on Recommended Daily Guidelines. The Department of Health's 5-a-day message has been supported by retailers.

The National Consumer Council's annual survey of supermarket actions to help their customers make healthier choices reported in 2006 that despite progress, most retailers scored poorly on communicating healthy eating to their customers, fruit and vegetables make up too small a proportion of price promotions compared to less healthy foods, and checkouts in many stores still promote unhealthy sweets and snacks.<sup>232</sup>

# **Gaps and challenges**

Despite initiatives to come out of the Food and Health Action Plan, a 2006 report from the National Audit Office, Audit Commission and Healthcare Commission was critical of government performance in meeting obesity targets<sup>233</sup> and in 2007 the government's Foresight Obesity review concluded that government policies were patchy and timid and require 'a substantial degree of intervention' and a 'systemic or paradigm shift'.<sup>234</sup>

The NAO report specifically called for greater clarity and direction from central government in tackling childhood obesity and recommended it is essential for the three departments (DH, DCMS and then DfES, now DCSF) to work closely together and provide strong leadership and to act quickly.

There are clear challenges ahead for government, the food industry and individuals in facing up to the implications of the growing body of evidence on UK levels of obesity and nutritional health. Evidence from the various reviews above, suggest that current efforts by government are not sufficient to meet targets for health improvements. In view of the supermarkets' role as major suppliers of food across the UK, with the power to influence consumer choice and understanding of the impacts of their food choice, we believe that government needs urgently to harness further this relationship behind its efforts to improve overall UK health. Work so far has had mixed fortunes:

 Labelling schemes have been implemented in a way that causes consumer confusion (some retailers are using Guideline Daily Allowances (GDAs), others traffic light labels)<sup>235</sup>

- There continues to be over-production of fatty, sugary and salty foods, though the FSA has achieved commitments and progress from all major retailers towards its voluntary salt reduction targets,<sup>236</sup> and FSA is developing targets to reduce saturated fat<sup>237</sup>
- Price signals and health messages are not congruent, so the healthiest foods are perceived to be most expensive, and the high calorie, high energy, poor nutrient foods are cheap.<sup>238</sup>

A growing evidence base on the impacts of food and agricultural production is highlighting potential new synergies between a diet that is good for health and one that is better for the planet. For example, meat and dairy production are significant contributors to greenhouse gas emissions and other negative environmental impacts.<sup>239</sup>

Diets high in meat and dairy are also linked to increased intakes of saturated fat and some cancers.<sup>240</sup> Yet the links between healthy and more sustainable diets are largely unexplored within public policy, illustrating the way in which 'health' policies within government have been developed separately from 'environmental' policies to promote more sustainable production and consumption.

Government's new strategy to tackle obesity includes a commitment to a voluntary Healthy Food Code of Good Practice for the food industry that includes addressing nutrition labelling, food marketing, and reduced consumption of unhealthy foods.

### **Recommendations**

#### FSA and DH:

- Harness the 'choice editing' role of supermarkets, during 2008 to reformulate products, shift balance of promotions towards healthier products and influence consumer awareness of the impact of their food choices to support healthier eating. If such an approach is insufficient, or creates conflicting reactions from the retailers (as with the food labelling work) it is our view that government should begin serious consideration of the role of regulation and/or legislation in requiring supermarkets to work with government to develop an influencing strategy, that will actively help citizens to make more sustainable food choices.
- To set targets for uptake of 'traffic light' labelling in 2008 and lobby at EU level for mandatory nutrition labelling including front of pack 'traffic light' labelling.
- To audit the effectiveness of proposed government social marketing campaigns as to whether they help citizens to make healthier choices.

### FSA, DH and Defra:

 Work collaboratively during 2008 to identify synergies and conflicts between health promoting and sustainable diets (including sustainably sourced fish, meat and dairy) and align health and sustainability message for consumers and the food industry.

#### HMT to:

 Explore during 2008/9 the imbalance in the way VAT is currently applied to food, and outline fiscal measures for redressing the imbalance which will support the uptake of healthy and sustainable food.



### 4.2.6 Fair relationships within supply chains

### What is the issue?

The distribution of value and power within food supply chains is an issue that is garnering much attention including from the government's Competition Commission.<sup>241</sup> Supermarket sourcing policies have the potential to contribute to rural communities and the viability of UK agriculture by supporting local/regional/UK producers, and to poverty reduction internationally through supporting trade with developing countries. 'Fair' relationships within supply chains are necessary to fulfil this potential. SDC's research in the food supply chain found there was a consensus of opinion amongst non-retailers that supermarkets maintain a very poor record when it comes to treatment of suppliers. We examine both the UK and the international development perspectives.

### **UK producers**

Unfair relationships between supermarkets and farmers is a public concern.<sup>242</sup> Competition Commission investigations into the grocery market in 2000 and 2007 have heightened the interest in supermarket relationships with their supply chains, and raised questions over whether they abuse their 'buyer power' in their dealings with suppliers. In the SDC's stakeholder survey, supermarkets' treatment of suppliers attracted a lot of criticism from non-retailers, with a perception from many that suppliers are being 'squeezed' to the extent that they are being put out of business.<sup>243</sup> NGOs and farming bodies, drawing upon farmer surveys, have complained of unfair terms of trade and excessive use of buyer power by supermarkets.244 245 246 The NFU report that farmers are being required to provide fruit and vegetables for "2 for 1" offers, but are paid for only one item whilst providing two.<sup>247</sup>

'Local food' is seen by many consumers as a means to support the local economy, including farmers and local businesses, though the term is undefined.<sup>248</sup>

UK agriculture is a significant employer, particularly of seasonal and short-term agricultural

workers. It is estimated 63,000 such workers are employed in the UK, many of whom are employed via agencies providing temporary labour, or 'gangmasters'.<sup>249</sup> The tragedy at Morecambe Bay in February 2004, where 23 Chinese immigrants lost their lives cockle-picking, drew public attention to the issue of gangmasters in the food industry.

### **International Development**

Trade with supermarkets can play a very important role in improving the economies of developing countries.<sup>250</sup> A small but significant amount of fresh fruit and vegetables available in our supermarkets comes from developing countries where agriculture is central to reducing poverty by creating jobs and income. For example, over one million people in rural Africa are supported by the fresh fruit and vegetable trade with the UK, injecting an estimated £200 million into rural economies.<sup>251</sup> SDC's stakeholder research found retailers and non-retailers critical of government's lack of clarity on contested sustainable development issues such as how to weigh up social benefits of trade with developing countries with environmental considerations such as water use in agricultural production and airfreight, articulated by stakeholders as the 'Kenyan Green Bean' question.

Organisations campaigning for international development argue that developing countries often fail to receive a fair share of the amount paid by consumers for their products.<sup>252</sup> Action Aid claims that supermarkets' trade with developing countries is based on poor wages, job insecurity, and a denial of basic human rights, and that "abuses in supermarket supply chains remain systematic, and in fact are becoming more severe".<sup>253</sup> For example, Action Aid's investigation into the Indian cashew nut industry found that for every pound spend by UK consumers, just one penny went to the Indian workers. By comparison importers, roasters and supermarkets in the UK shared 77p.

### What is government's current approach?

### **Domestic policies**

Competition framework:

- International and European trade commitments include European competition rules
- Competition Act 1998
- Enterprise Act 2002
- Supermarket Code of Practice statutory under section 88(2) of the Fair Trading Act, 1973
- Companies Act 2006: duties on directors concerning welfare of employees, community and environment; reporting through annual business review.

A range of UK workplace legislation aims to ensure equality and fair basic terms and conditions:

- Health and Safety at Work Act 1974; Equal Pay Act 1979; Sex Discrimination Act 1975; Race Relations Act 1976; Disability Discrimination Act 1995; Equality Act 2006
- National Minimum Wage Act 1998
- Gangmasters Act 2005 requires all labour providers (gangmasters) to be licensed, and the Gangmaster Licensing Authority (GLA) to run a register of all gangmasters, and enforce the licensing scheme. The GLA runs a register of all labour providers operating in the agricultural and shellfish industries and the food processing and packaging sector and enforce the licensing scheme.<sup>254</sup>

Concerns over the potentially negative impacts on competition in the grocery retail sector has led the Office of Fair Trading to refer two inquiries into the grocery market, to the Competition Commission in 2000 and 2006, the latter of which is ongoing at the time of writing. Government's reaction to public

and political concern over the dominance of the retail sector, including supermarket's relationship with suppliers led to the introduction of the Supermarket Code of Practice, which came into use in 2003, following the Competition Commission's first report on competition in the grocery sector.<sup>255</sup> The Interim Findings of the latest inquiry were published in October 2007,<sup>256</sup> and find competition can be prevented, restricted or distorted in some local markets. There is evidence of some supply chain practices that transfer excessive risks and unexpected costs to suppliers, adversely affecting competition, and possible market remedies are being investigated.

There are a number of government-funded initiatives to support UK agriculture, including the former Eat the View, the ongoing Public Sector Food Procurement Initiative<sup>257</sup> and the regional food partnerships<sup>258</sup> which have aimed to promote and support local food.

### **International Development policies**

The 2006 White Paper, Eliminating World Poverty sets out UK government's approach to global poverty reduction. It builds on the UK's commitment to the United Nations Millennium Development Goals agreed in 2000. The White Paper advocates economic growth, with agriculture having a key role, as the single most powerful way of pulling people out of poverty. It acknowledges however the need for a long-term approach, and that 'reducing poverty sustainably means ensuring that today's development successes do not become tomorrow's environmental failures'.<sup>260</sup>

### **Targets**

- DFID White Paper 2006; Development Act 1999; policy of supporting fair trade initiatives and supporting growth in trade between supermarkets and developing countries
- DFID's £2 million Food Retail Industry Challenge Fund
- FISS voluntary target to double amount of food goods covered by ethical trading initiatives
- FISS aims to encourage the industry to adhere to the Ethical Trading Initiative Base Code.

As part of DFID's 'aid for trade' programme it provides £4 million to help increase Southern Africa's exports of fruit, vegetables and other natural products. <sup>261</sup> This includes assistance to poor producers to meet health and safety standards set by importing countries or supermarkets, and help in getting goods to market. DFID's stated principles for agriculture are to seek to maximise growth, productivity and

employment whilst also ensuring sustainable use of land and water.<sup>262</sup> DFID announced in December 2007, a new £2 million fund to help increase the UK market for sustainably produced food, which will support farmers to develop innovative ideas for sustainable products.<sup>263</sup> This shows a recognition of the need to integrate trade with environmental sustainability in producer countries.

### **Retailer action**

During 2007, the major retailers pledged to increase prices paid to farmers in response to repeated warnings from farming groups and observers about the state of the UK industry.<sup>264</sup> Many of the major retailers also have initiatives to increase the amount of local produce in their stores.<sup>265</sup>

Retailers in our survey pointed to fair trade as an area of priority where many say they are taking action.<sup>266</sup> Civil society-led initiatives, such as Fairtrade and the Ethical Trading Initiative,

have been at the forefront of the drive to improve livelihoods and working conditions of producers in developing countries.<sup>267</sup> The range of Fairtrade products in supermarkets on offer is increasing, and some supermarkets have changed whole product lines over to Fairtrade, for example bananas at Sainsbury's<sup>268</sup> and all own-label tea, coffee and chocolate at the Co-operative<sup>269</sup> and tea and coffee at Marks and Spencer.<sup>270</sup>

## Gaps and challenges

### **Domestic**

Although the Competition Commission's Statement of Issues<sup>271</sup> for the 2006-08 inquiry blocked many concerns relating to retail diversity and the environmental impacts of supermarkets, it committed to examining whether there were any adverse effects of buyer power on suppliers, and the effectiveness of the existing Supermarkets Code of Practice.272 This Code of Practice was established in response to the exploitation of buyer power uncovered in the 2000 investigation. An OFT review of the Supermarkets Code of Practice in 2005 found that, despite critiques of its effectiveness by many organisations, the structure of the Code itself was not a problem, but rather that it was not properly used by suppliers to resolve disputes.<sup>273</sup> However, there is ongoing concern that the Code is insufficiently strong and not fit for purpose, as reflected in many submissions to the Competition Commission's Groceries Market Investigation.<sup>274</sup> We welcome the decision in the inquiry's Provisional Findings to address this issue and support measures to address the exercise of buyer power by grocery retailers which transfer excessive risks and unexpected costs to suppliers.<sup>275</sup>

The key issue for farmers, has been the concept of equity. Fair trade in the international trading context, is not simultaneously absorbed into the concept of fair trading in the UK context. Government itself has not addressed fairness within domestic supply chains in FISS, and government's overarching goals for the farming sector are that they need to respond to market demand. Nevertheless we believe there continues to be a role for an independent body to oversee and adjudicate on fairness between traders. The Office of Fair Trading would appear to be well placed to have a more specific particular role in this respect.

'Locally' sourced food has captured the interests of both retailers and the public, but it is an ill-defined concept, and there has been little attempt to define 'local food' by policy-makers.<sup>276</sup> The Curry Commission<sup>277</sup> called for an enforceable definition of 'local' food. In research for Defra, supermarkets asked for more clarity in the definition of local food.<sup>278</sup> More recent research by the FSA found six out of ten consumers say there should be regulations or guidance on what food can be called local. Given the growing interest, SDC considers a clearer

enforceable definition is required. The relationship between 'local' and 'seasonal' food also requires clarification, as seasonal food that has not travelled great distances to be on the shop shelves, and has not required high levels of energy input to be grown (e.g. in greenhouses) may well be more sustainable than many other products. Monitoring and enforcement of the Gangmaster Legislation has been reported as an issue, with anecdotal evidence emerging to suggest that in Lincolnshire (where an estimated 1000 gangmasters operate with only two GLA inspectors) 60-70% of gangmasters have not obtained an operating licence.<sup>279</sup>

### **International Development**

Both government and retailers have been content to rely on the voluntary efforts of the Fairtrade and Ethical Trading Initiative movements, to build the profile for fairly traded products. But this passive approach depends heavily on consumer demand, and masks the real effort that is needed systematically to improve social and environmental performance throughout the product supply chain. Furthermore Fairtrade and similar standards do not address environmental impacts, and in our view a more

holistic approach would be to include avoidance of natural resource and biodiversity degradation into standards.

Government's international development programmes, through DFID, support developing countries gaining access to supermarket trade, and this effort is skewed towards increasing the amount of trade rather than maximising value – economically, socially and environmentally – for producers.

### **Recommendations**

### **DFID** to:

- In 2008 review its existing policies on less developed country development to ensure that support for agricultural expansion and access to overseas markets is based on fair distribution of value within the chain (Fairtrade type standards), as well as mitigating against overuse of natural resources or degradation of biodiversity, particularly in the context of changes in water patterns with climate change.
- Development policies need to be 'futureproofed' against the emerging impacts of climate change on growing regions, the implications of carbon constraints/pricing, and the effects on domestic production and food security.

#### DFID, Defra and NGOs to:

 Develop an expanded standard that integrates fair trade standards with environmental sustainability, to provide retailers and consumers with a broader confidence in the overall impacts of the labelled products.

### DFID and Defra by 2008 to:

 Articulate government's policy goals as achieving the joint goals of international development and environmental sustainability, reflecting integration of objectives, not trade offs. This articulation should acknowledge that longer term goals of full internalisation of the cost of carbon cannot be achieved in the short term, and therefore government policy is to support the concept of fair trade with environmental sustainability.

#### Defra and BERR to:

 Articulate what fair trade means in UK-based food supply chains, including social justice and environmental sustainability.

#### **BERR to:**

 Consider amending the Terms of Reference of the Office of Fair Trading so its remit acts to safeguard fairness throughout supply chains.

### BERR, with the Competition Commission, to:

 In 2008/9 develop how the Office of Fair Trading could ensure that UK supply chains from producer to retailer, are operating under rules of fair trade, including consideration of the governance and scope of the Supermarkets Code of Practice.

### Defra, RDAs, industry bodies (NFU, CLA etc) to:

 Facilitate local supply chains infrastructure (e.g. hubs) and skills (e.g. marketing, accessing retailers, advice on meeting standards requirements)  In 2008/9 raise the profile of skills issues through the Sector Skills Councils (reflecting sustainability challenges): for buyers, producers, logistics workers.

### Defra and FSA:

• To lead on developing an enforceable definition of local food.



Although reluctant to being seen to be 'leading' supermarket retail policy, government leads policy development on key issues such as obesity, climate change and waste, and it needs supermarkets to either deliver these policies effectively (climate change and waste) or to use their powers of influence in a way that supports its policy goals (obesity). Our evidence gathering for this review, demonstrated that retailers, the public and other stakeholders expect government to have such a leadership role.

Supermarkets exist to provide goods and services, and to generate profits for their shareholders, but governments are meant to be the guardians of the public good. Comments from the public, such as:

"Government has allowed supermarkets to go unchecked for too long." 280

and ones from supermarkets such as:

"[Government is] definitely not giving clear and sufficient leadership. No framework in terms of vision of where they want to go."<sup>281</sup>

"There is no long term certainty of where their policy is going."<sup>282</sup>

lead us to conclude that there is both an appetite for government leadership to be exercised, and political space and acceptability for change. In this chapter we explore key leadership roles for government:

- Creating of a vision for a sustainable food system
- Continuing to build the evidence base
- Showing policy courage to catalyse change, and using the range of policy tools at government's disposal: information and advice; voluntary initiatives; choice editing; best practice guidance or standards; benchmarking; economic schemes such as trading or fiscal incentives/penalties; legislation, regulation and codes of practice.

We also explore an approach which is gaining further currency – roadmapping for sustainability – to support delivery of these goals.

### 5.1 Creating a vision for a sustainable food system

Retailers told us a lack of an overarching sustainable food strategy, or vision, that provides priorities for retailers, and gives them guidance or incentives, is a key barrier to their efforts to improve sustainability. They perceive a lack of clear and consistent direction of travel from government. Therefore retailers are unclear about which areas to prioritise or focus on. Government policy directions and goals also come without guarantees that they are here for the long term which inhibits financial investment. Without this, and with the fear that government may reverse policy decisions, retailers are cautious about how far and how fast to take their action.

In particular, industry is looking to government to set a stable agenda so that it can plan for the future and make the necessary investment and changes to their business in a logical and progressive way.

"Government needs to set a longterm, stable agenda. For example, they said they want to reduce carbon emissions by 60% by 2050 – they need policies around this. Otherwise it's a barrier to investment as we're not sure who will be in power in five years time."<sup>283</sup>

Farming, food and drink industry representative

To develop thinking towards a shared vision for a sustainable food system, SDC held a workshop in June 2007, bringing together government departments and agencies, food chain interests and civil society organisations. The report is available from the SDC's website.

This identified strong support for government to lead on developing a shared vision for a sustainable food system.

### Key findings from the workshop are:

- There is strong support for government to lead on developing a shared vision for a sustainable food system that is ambitious and aspirational in setting out long-term targets
- The fundamental purpose of developing a vision must be to accelerate progress towards sustainability by providing clear priorities for government, retailers (and other food system businesses) and consumers within a clear concise vision
- Strong political leadership and ownership, that transcends short-term political change, will be essential to its success. This is necessary to provide business with long-term certainty for investment for sustainability. Lack of political leadership is seen as a barrier to progress
- The vision must provide consistency and clarity, including a consistent narrative across government departments and clarity to current confusion over green trade-offs, for example local sourcing and international development. Government has a clear role in providing the evidence base to identify sustainability 'hot spots' and priorities for action
- The scope should be comprehensive and cover the whole of the UK food supply system, including its global impacts. Ideally it should be UK wide and ensure co-ordination and agreement with devolved governments
- Its breadth of vision should be broad and include economic, social and environmental aspects

- Elements of a vision identified included:
  - carbon/greenhouse gas emissions/energy
  - water
  - biodiversity/natural resources and land use
  - waste
  - the role of GM and biotechnology
  - contribution to rural communities
  - labour conditions, trade justice and development
  - health and nutrition
  - animal welfare.

We recognise that many of the issues are complex. But it is precisely because issues such as climate change and obesity are complex, that government leadership and action at all levels of governance and across society will be required to find solutions. Only government has the ability to co-ordinate such action, working with stakeholders, including businesses, civil society and consumers, and with devolved administrations, regional and local government and supra-national governance, including the EU.

To achieve this we propose an approach – roadmapping for sustainability. This is a method for facilitating collaboration between government, business and other stakeholders to bring about market transformation above what individual actors can achieve. Government is already using this approach to develop product roadmaps in line with the recommendations of the Sustainable Consumption Roundtable.<sup>284</sup>

The outcome of a roadmap is likely to involve a series of timely and coordinated interventions, implemented by different stakeholders, that together deliver significant sustainability improvements. By providing certainty about future regulations, policies and market expectations, roadmaps can encourage businesses to invest and innovate to provide the products and services of the future.

SDC advocates a six stage road-mapping process<sup>285</sup> – see box overleaf. This starts with requiring an understanding of the problem, brings the right people together (convening) to agree the scope of the roadmap and where we want to get to (agreeing a vision) before considering the 'tools' that will help get there and the milestones that will enable progress to be measured.

# Six stages of road-mapping for sustainability

# 1 What's the problem?

Understanding the problem, its impacts and its future context is an essential starting point for a roadmap. A pragmatic approach that achieves a balance between accuracy and practicality may be required to start the process.

# **2 Convening** – getting the right people together

The role of the convenor is to get the right stakeholders together, particularly those that have the capacity to take action. Stakeholders typically include businesses, relevant government departments and civil society. Given the visionary nature of road-mapping the convenor may actively seek to work with progressive organisations in order to build an ambitious agenda for change. Government has a leadership role as a convenor when issues are complex. Convening for sustainability is different from more traditional government consultation and engagement processes in that it recognises stakeholders as partners with a shared responsibility to work towards sustainable solutions.

# 3 Agreeing the priority issues

Agreeing the nature of the problem and the scope that a roadmap can address is another important stage. Evidence may expose priority areas for action but equally may reveal tensions between differing sustainability objectives that need to be resolved.

# 4 Vision – where do we want to get to?

Agreeing the goal – point B on a roadmap – will start to make explicit the level of transformation that is required. Creating a vision for the future, then enables 'back-casting' to determine what is required to get there.

# **5 Tools** – what is going to get us there?

A critical stage of the roadmap is to agree what tools to use and which point they are best applied. There is an extensive range of levers that can be applied to support progress. For example, appropriate legislation can swiftly raise minimum standards, whereas industry is often best placed to develop new technologies or other innovations. However a roadmap approach allows each intervention to be co-ordinated to reinforce their effects.

# **6 Deadlines** – What are the key milestones?

Fundamental to a roadmap is an agreed, feasible timescale and a clearly specified level of transformation. This allows all stakeholders to adjust their activities to deliver results. Demanding deadlines can also drive innovation. Progress can be assessed and reviewed.

### **Recommendations**

### Roadmap for a sustainable food system

SDC recommends that Defra work with retailers and stakeholders, including other Government departments including the Food Standards Agency, Department of Health, Department for International Development, Department for Transport, Treasury,

Department for Business, Enterprise and Regulatory Reform, and in liaison with devolved administrations, to develop a roadmap for a sustainable food system.

### Specifically we recommend this roadmap for a sustainable food system:

- Develops a shared vision for a sustainable food system that is ambitious and aspirational in setting long term goals
- Is backed by strong political leadership and ownership, that transcends short-term political change and provides business with long-term certainty for investment
- Is comprehensive including economic, social and environmental aspects and global impacts of the UK food supply system
- Provides consistency, including a consistent narrative across government departments and co-ordination with devolved administrations

- Provides clarity to current confusion over perceived trade-offs
- Identifies levers and incentives to accelerate progress towards the vision by providing clear priorities for government, retailers (and other food system businesses) and consumers
- Provides indicators and milestones to measure and evaluate progress.

## 5.2 Leadership in building the evidence base

Government already recognises its important leadership role in building an evidence base<sup>286</sup> and has sound science as one of the underpinning principles of the government's sustainable development framework. Research such as Defra's 'Shopping Trolley' project, provides valuable evidence on the environmental impacts of food production and consumption.<sup>287</sup> Nevertheless there are gaps and uncertainties in the evidence base, and tensions between differing environmental and social priorities.

SDC's research for this review<sup>288</sup> found that retailers want government to provide a better steer on priorities for a sustainable food system, as they find current research outputs often add to their confusion, as an overarching context and steer is missing. Research on consumer understanding of food

for Defra and IGD shows only 'a partial knowledge and understanding of what sustainability entails',<sup>289</sup> and 'confusion is limiting consumers' ability to make sustainable choices'.<sup>290</sup> We have already highlighted earlier in this report some of the key confusions over whether 'locally-sourced' foods have lower environmental impacts, the tension between airfreighted products versus the international development advantages, the relative merits of organic and conventional production systems for health or for the environment, whether eating more fish for health will continue to damage diminishing fish stocks, and most contentiously, whether a lowmeat diet is a necessary part of having a reduced impact on the global environment.

We perceive a nervousness on the part of government, as the evidence builds on these

'wicked' issues, illustrated by the low-key addition of the Shopping Trolley research onto Defra's website. We agree with the FISS Champions' Group on Ethical Trading which said 'Government should have the confidence to use its own evidence base and convening power to develop and share its thoughts and opinions on key issues of sustainability in the food supply chain'.291 The public attitude research by Defra<sup>292</sup> reveals citizens questioning government's commitment to achieving change in sustainable food production, as they are not seeing government educating and informing the public of what they should be doing and how. We conclude that government needs to find a way of providing information that empowers consumers to feel that they can make a difference in this area.

To do this government needs to continue to build the evidence base and to use this to support the direction and shape of food and agriculture policies. We welcome the road-mapping work that Defra has started with the dairy sector and intends to undertake on meat production, as this process will reveal the significant contribution that the meat and livestock industry makes to greenhouse gas emissions, and environmental impacts more broadly. However the health impacts should also be brought into the equation. Such evidence will then need to be translated into active policies to tackle both the environmental and public health impacts. We recognise that there are implications for business, including farming, and consumers in shifting production and consumption away from high-impact meat diets, but the long term benefits are likely to outweigh the short term costs.

We do not underestimate the challenges in shifting behaviour towards lower impact production and diets. But we urge government not to be hesitant in sharing information and evidence and starting open conversations now about future directions of food production and consumption that address these impacts in the longer term.

### **Recommendations**

Government to continue to build the evidence base that will support the development of a coherent sustainable food strategy, and:

- Put sufficient resources into building a robust evidence base, with a particular focus on contested and unclear sustainable food issues
- Share evidence openly and initiate dialogue and engagement with stakeholders
- Engage closely with other government departments, research bodies nationally and internationally, to share and learn from emerging research
- Disseminate evidence in a way that is accessible and useful to external stakeholders including retailers
- Translate the evidence base into clear and consistent messages and priorities for the food chain, including the public
- Use evidence and engagement to inform policy development.

We recommend the following areas as priority areas for on-going and further research:

- The synergies and tensions between a diet that is good for health and good for the planet
- The comparative greenhouse gas implications of different farming systems including intensive and organic production systems
- The social and environmental value of 'local', 'regional' and 'seasonal' foods
- Comparative sustainable development impacts of international and domestic production, taking account of development and environment perspectives, including impacts for rural economies in UK and overseas, sustainability of natural resources, and greenhouse gas emissions.

### 5.3 Leadership in catalysing change

As government recognises in Securing the Future, its sustainable development strategy<sup>293</sup> it cannot deliver sustainability by itself. The 'triangle of change' model, developed and championed by the Sustainable Consumption Roundtable,<sup>294</sup> advocates a partnership approach between business, people and government: I will if you will.

Within the 'triangle of change' government has an important role as an 'enabler' to catalyse change towards a more sustainable food system. This enabling role is also consistent with government's '4Es' approach in Securing the Future, <sup>295</sup> 'enabling', 'encouraging', 'engaging' and 'exemplifying'.

In addition, feedback from supermarkets as part of this review, emphasised that consumer demand is the biggest motivator for supermarkets to make changes for sustainability. They therefore act with considerable caution if they do not perceive a strong consumer pull,<sup>296</sup> as evidenced by the often limited scope of many of the supermarkets' sustainability initiatives. Supermarkets perceive that as government heightens consumer awareness of issues like sustainability, so retailer activity is likely to change further. Retailers said they would welcome further input and assistance from government to influence consumer behaviour.

Defra's public attitudes research<sup>297</sup> found that people consider supermarkets to have a central role in creating change, through their own impacts, and in helping consumers change their behaviour. Supermarkets can:

- Make sustainable choices clearer
- Make sustainable foods a realistic and affordable choice
- Reduce 'bad' offers and transfer them to foods with lower environmental and social impacts
- Reduce packaging, and introduce standard bio-degradeable or recyclable packaging.

But our findings also caution against relying on consumers to set the pace of change. Because the issues are so complex and consumer attitudes can be slow to change, government cannot rely on the consumer voice alone to lead the way. As our research with the Sustainable Consumption Roundtable concluded, consumers have rarely delivered the necessary market transformation by themselves,<sup>298</sup> the most significant achievements have been through government policy interventions.

There is now consensus, following the Stern review<sup>299</sup> and the growing scientific evidence on climate change, that the status quo of "business as usual" is not an option. This is brought sharply into focus with the November 2007 declaration by 150 global businesses calling for international agreement on a framework for action on climate change, which will give them the security and motivation to invest differently, and take radical action to limit their impact on the global environment.<sup>300</sup>

Government's enabling role therefore encompasses the range of policy interventions that it has at its disposal, and each of these would be examined in the road-mapping process, to assess its applicability and effectiveness. The partnership approach between government, business and the citizen would help to define which policy mechanisms to use in which circumstances to maximise impact. Approaches include informationtype measures (advice and labelling), published evaluation of progress (benchmarking, assessments against indicators) and non-negotiable measures such as fiscal incentives/penalties, regulation and legislation.

There are two proposals for overarching interventions which are not covered elsewhere, and which we think are worth further attention. These are:

- Government's role in presenting the range of existing standards in the food supply chain, under a holistic umbrella
- The proposal that a supermarkets' regulator is required to monitor and evaluate supermarkets' performance and behaviour.

#### **Standards**

Standards are used by supermarkets to achieve tight controls over their supply chains. Supermarket standards, because of their enormous influence over the supply chain, have become more relevant to many farmers than government's standards, despite

the fact that farmers annually receive around £1.5bn of public subsidy.

But standards, both mandatory and voluntary, range across the breadth of sustainability issues: animal health and welfare, UK worker health, safety

and welfare conditions, fair trade, government's environmental stewardship standards, LEAF standards of a whole farm environmental approach, organic Soil Association standards, Red Tractor, nutritional standards. This range and complexity has been noted by some commentators in the process of this review, as needing to be gathered together into a coherent whole. This could be similar to the Building Regulations, which consist of fourteen elements<sup>301</sup> which can be upgraded and changed separately, but which remain under the umbrella concept that every builder has to be applying as they build or refurbish a building. Another approach

could be to provide a sustainable food system standard web portal, or a publication with separate parts that can be regularly updated as necessary.

The details of how such an idea could be developed would be for debate between stakeholders and government through the roadmapping process, as we have recommended earlier. We recommend this concept is worthy of further work by Defra in collaboration with retailers and stakeholders including other government departments, to help provide clarity and support to the vision for a sustainable food chain we have advocated.

### Creating a supermarket regulator

Supermarkets operate in a market economy, and the only regulator who oversees their activities is the Competition Commission. However the remit of the CC is focused on whether competition is flourishing, and on whether there is any anti-competitive practice. The Office of Fair Trade has some locus with supermarkets, particularly with the Code of Practice between farmers and supermarkets; however, as we have highlighted earlier, we believe the scope of 'fair trade' within the UK needs further examination, as we perceive difficulties within the supply chain that the Competition Commission appears not to be fully addressing.

Commentators have called for a separate Supermarket Regulator, potentially modelled on one of the public service regulators, whose duties and powers extend into the areas of concern that have been highlighted in this review. There may be merit in this proposal, particularly as the influence of supermarkets is so large up and down the supply chain. However further consideration of the compatibility of this proposal with EU and WTO rules would be needed.

On balance we perceive the most urgent issue of relationships between suppliers and retailers to be one the Office of Fair Trading could be mandated to tackle.

# 6 Conclusions

This report has reviewed government and retailer initiatives towards a sustainable food system with a particular focus on six priority policy areas – climate change, waste, water, natural resource use, nutrition and supply chain relationships. We conclude there is more potential for food retail to lever positive change and we make specific recommendations on how government departments can better enable retailers to deliver progress.

From the insights and analyses presented to the SDC in the course of our review, there is widespread agreement that the sustainability challenges facing the food system require serious action. There is a growing willingness to address sustainability challenges, by retailers, the food chain and consumers. But there is also confusion about what a sustainable food system looks like and how all sections of government can work together to achieve this. This lack of clarity and cohesion is seen as a barrier to progress.

We found supermarkets, the public and other stakeholders all asking for greater government leadership towards creating a more sustainable food system. We conclude there is an appetite and an opportunity for government to create a policy framework and a vision that identifies priorities for retailers, to continue to build the evidence base and to apply the range of policy tools at its disposal to enable progress.

SDC is already working closely with government to support this policy direction. We have submitted our research and evidence to the current Strategy Unit Food Policy Review. We shall be discussing our recommendations with relevant Whitehall government departments, and with food retailers. We shall also be engaging in Scotland and in Wales where administrations are currently developing new policy initiatives, towards food, farming and nutrition.

In our engagement and advocacy with government we shall seek to ensure a sustainable development framework is at the core of policy initiatives and to identify opportunities for action by government, business and people to catalyse change.

# Appendix 1

# Departmental responsibilities in relation to food/supermarkets

England and UK-wide (where not devolved)			
Department /Agency/ Regulator	Responsibilities		
Business, Enterprise and Regulatory Reform (BERR)	National Minimum Wage Working Time Directive Fair markets Competition policy Retail Policy Forum Fuel blockades Globalisation – trade Corporate manslaughter Employment laws/ tribunals Women's Unit/ Equality Import/ trade/ anti-dumping Consumer Affairs Trading Law Enforcement Energy costs/ regime Productivity Work life balance Company law Intellectual property Sunday opening Credit sharing Consumer and trading standards		
Cabinet Office (CO)	Social Exclusion Task Force Strategy Unit Food Policy Review		
Communities and Local Government (CLG)	Communities Planning policies Urban regeneration Regional government – Regional Spatial Strategies Local government – Local Development Frameworks		
<b>Competition Commission</b> – a Non-Departmental Public Body	Market investigations Planning and competition		
Department of Children, Schools and Families (DCSF)	National Curriculum Skills and basic skills		
Department of Environment, Food and Rural Affairs (Defra)	Farming policy Food supply chain Animal welfare Sustainability – FISS Life Cycle Assessment Sustainable consumption Prescribed Designations of Origin Waste policy - packaging, WEEE etc. Organics Horticultural regime Energy crops Biotechnology Fisheries		

Department for Innovation, Skills and Universities	Skills and basic skills Innovation Research and Development			
Department for International Development (DfID)	Trade with developing countries Global sourcing			
Department for Transport (DfT)	Freight Passenger transport Aviation Congestion charging/ toils Road User Charging Drivers Hours Local deliveries Supply chain efficiency Transport planning			
Department of Health (DH)	Public Health Diet and nutrition (5 a day) Physical activity			
Department of Work and Pensions (DWP)	Age discrimination Pensions Welfare to work Disability Social security payments			
<b>Environment Agency (EA)</b> – England and Wales – Non-Departmental Public Body	Packaging and waste regulation Environmental impact assessments Legal compliance Water quality			
<b>Food Standards Agency (FSA)</b> – Non-Ministerial Government Department	Food safety Nutrition Obesity Labelling			
Home Office (HO)	Equality and Diversity Migrant labour			
HM Revenue and Customs (HMRC)	International tax arbitrage Tax gap Child Trust Funds Duty Packaging and waste regulation Environmental impact assessments Legal compliance Water quality Levels			
HM Treasury (HMT)	International Tax Arbitrage Rating Corporate Taxation Productivity Pensions Planning Competition RPI/ONS – new inflation index Poverty and inequality Sunday opening Tax gap			

Ministry of Justice	Devolution		
<b>Ofcom</b> – a Non-Ministerial Government Department	Advertising Price		
Office of Fair Trading (OFT) – a Non-Ministerial Government Department	Code of Conduct Market Share Suppliers Planning and competition		

Devolved areas				
Scottish Government				
Children, Young People and Social Care Directorate	Workforce and capacity issues			
Climate Change and Water Industry Directorate	Climate change Water			
Environmental Quality Directorate	Waste and Pollution Reduction			
Lifelong Learning Directorate	Skills for life and work Transitions to work			
Marine Directorate	Food and fish			
Planning Directorate	National planning framework			
Public Health and Wellbeing Directorate	Equality Unit Health Improvement Strategy Social Inclusion			
Rural Directorate	Agriculture Animal health and welfare			
Scottish Environmental Protection Agency – Non-Departmental Public Body	Packaging and waste regulation Environmental impact assessments Legal compliance Water quality			
Transport Directorate	Bus, freight and roads Aviation, ports and mobility Transport strategy			

Welsh Assembly				
Department for Children, Education, Lifelong Learning and Skills	Skills Workforce learning			
Department for Economy and Transport	Freight Passenger transport Economic policy			
Department for Environment, Sustainability and Housing	Waste Environmental policy Built and natural environment			
Department for Public Health and Health Professions	Public health Diet and nutrition Physical activity			
Department for Rural Affairs and Heritage	Agriculture Fisheries			
Department for Social Justice and Local Government Directorate	Local government policy			

Northern Ireland Executive			
Department of Agriculture and Rural Development	Fisheries Farming Organics Food industry Rural development		
Department for Employment and Learning	Skills and training Employment rights		
Department of the Environment	Planning Local government policy Waste Water Natural and built environment Climate Change		
Department for Enterprise, Trade and Investment	Consumer affairs Economic development policy Companies registry		
Department of Health, Social Services and Public Safety	Health Promotion		
Office of the First Minister and Deputy First Minister	Equality Fair employment Economic policy		

# Appendix 2

# Wales, Scotland and Northern Ireland policy contexts

Devolved government was created in the UK in 1999, establishing the Scottish Parliament, the National Assembly for Wales and the Northern Ireland Assembly. A devolved government returned to Northern Ireland after several years suspension in 2007.

Matters devolved to Scotland, Wales and Northern Ireland include agriculture, fisheries and forestry, economic development, education, environment, health, home affairs, local government, sport, the

arts, planning, transport, training, tourism, research and statistics and social work.

Reserved matters, where Ministerial function rests with UK Government ministers, include broadcasting policy, common markets for UK goods and services, energy, defence, employment, foreign policy and relations with Europe, international development, transport safety and regulation, social security and stability of the UK's fiscal, economic and monetary system.

### Scottish policy context

### Policy background

Scottish Food and Drink Strategy (1999)

A Forward Strategy for Scottish Agriculture (2001)

A Forward Strategy for Scottish Agriculture: Next steps (2006)

A Strategic Framework for Scottish Aquaculture (2003)

Organic Action Plan (2003)

A Sustainable Framework for Scottish Sea Fisheries (2005)

Seas the Opportunities – A Strategy for the Long Term Sustainability of Scotland's Coasts and Seas (2005)

Scotland's Biodiversity: It's in Your Hands – A Strategy for the conservation and enhancement of biodiversity in Scotland (2004)

Changing our Ways: Scotland's Climate Change Programme (2006)

Climate Change Bill (announced 21 June 2007)

Planning (Scotland) Act 2006

National Planning Framework expected 2008

Planning Advice Note (PAN) 59 Improving Town Centres 1999

Scottish Diet Action Plan (1996)

Improving Health in Scotland: The Challenge (2003)

Eating for Health: Meeting the Challenge (2004)

Better Health, Better Care: Action Plan 2007

Food and Health Delivery Plan expected during 2008

Scotland National Waste Strategy 1999 and National Waste Plan 2003 (SEPA and Scottish Executive): 55% of municipal waste to be recycled or composted by 2020; Reduce landfilling of biodegradable municipal waste to 85% of 1995 level by 2006 (i.e. 1.5 million tonnes); stabilise the growth of municipal waste by 2010; waste minimisation advice to business.

Business Waste Framework (2007)

Scottish Executive & SEPA (2007) Household Waste Prevention – Action Plan (Scotland)

Choosing our Future: Scotland's sustainable development strategy<sup>302</sup> is the first Scottish Sustainable Development Strategy, and sets out the previous administration's vision for sustainable development and action across a broad range of policy areas. The Strategy highlighted the role of the Scottish Food and Drink Strategy<sup>303</sup> in achieving "a sustainable and profitable food and drink industry in Scotland that is consumer-focused, market-led and internationally competitive". It also recognised the important contribution of the food and drink industry to communities (from primary producers through to retailers and the food service sector) by creating wealth and providing employment and access to a healthy, affordable diet. It encouraged the food industry and consumers to increase the take-up of locally produced food and respond to the growing consumer interest in healthy balanced diets by providing choices that help inform buying decisions.

Choosing Our Future also highlighted funding for work undertaken by WRAP to support retailers and their suppliers in R&D projects that will minimise food and packaging waste originating from the retail sector. The Scottish Government has now committed itself to move Scotland towards a zero waste society, and will look in particular at waste prevention, waste minimisation, increasing recycling and landfill diversion.<sup>304</sup>

### 1.1 Climate Change

In June 2007 the Scottish Government announced it would consult on a Climate Change Bill, to set a mandatory target of cutting emissions by 80% by 2050.<sup>305</sup> The 60% target in the UK Climate Change Bill applies to the UK as a whole, but Scotland intends to show leadership, based on the international scientific consensus, and go further by setting a higher target which will be the driver for devolved climate change policies.

The previous administration, together with the Department for Transport, has supported an initiative to move freight from road to rail. This was funded through the Freight Facilities Grant, which awards grants to projects that can deliver an environmental benefit through switching from road to rail or water.<sup>306</sup>

#### 1.2 Waste

The National Waste Plan,<sup>307</sup> launched by the Scottish Executive and the Scottish Environmental Protection Agency (SEPA) in 2003, commits to targets to improve recycling and composting of municipal waste, and reduce landfilling of biodegradeable waste, as part of responsibilities through the EU Landfill Directive. Levels of recycling and composting have risen rapidly in the last five years, and latest data from SEPA<sup>308</sup> suggests that 30% of municipal waste is being recycled or composted. However, the largest proportion is still sent to landfill,<sup>309</sup> causing emissions of methane from biodegradable waste and unsustainable resource use.

The Government provides funding to the Scottish Waste Awareness Group to deliver a national campaign called 'Waste Aware Scotland'.<sup>310</sup> WRAP works across Scotland and with retailers to reduce packaging and food waste. Envirowise also operates in Scotland and supports business to reduce waste and improve resource efficiency.

### 1.3 Agriculture

A Forward Strategy for Scottish Agriculture: Next Steps<sup>311</sup> (2006) builds on and updates the 2001 strategy A Forward Strategy for Scottish Agriculture. <sup>312</sup> It sets out a revised vision with emphasis on a sustainable farming industry which will take the lead in the protection and enhancement of the environment and help achieve goals relating to food production/marketing and the rural environment.

The Organic Action Plan was launched in 2003 with the aim of boosting Scotland's organic sector.

### 1.4 Diet-related health

Scotland has a history of poor diet and health inequalities amongst its population. The Scottish Diet Action Plan (SDAP) was launched in 1996 to improve Scotland's diet and narrow health inequalities. The plan's aim was to shape consumer tastes; increase consumer demand for healthier food; provide healthier food through changes in the supply chain; give people a better understanding of healthy eating through training, labelling and

improved public sector catering; and influence those who govern and monitor changes in health. Ten years after SDAP's creation, its effectiveness was reviewed by an expert committee.<sup>313</sup> Whilst there had been some very welcome improvement in mortality,<sup>314</sup> the review found there are still big gaps between men and women, and the gap between the poor and the affluent has been widening.<sup>315</sup>

A Food and Health Delivery Plan that will set out how to encourage a healthier national diet in Scotland is expected to be published during 2008.

#### 1.5 Food

The Scottish Government is currently developing a National Food Policy for Scotland which will seek to provide a joined-up, holistic approach to food across numerous agendas including environment, enterprise, health, education and transport. Amongst other things, the policy will address local sourcing and consumption of food;<sup>316</sup> public sector food procurement; food labelling and animal slaughter. Wide stakeholder consultation is being employed in developing the policy which is due to be launched in June 2008.

# 2. Government approach to date

### SDC Review of progress on Sustainable Development in Scotland

The SDC conducted a review of sustainable development in Scotland in 2007.<sup>317</sup> This in-depth assessment focused on steps the new Scottish Government should take to move further toward a sustainable Scotland.<sup>318</sup> Food policy is one of five priority topics that is singled out for attention, and needs to be clearly set within a sustainable development framework. There are major challenges in tackling wider issues around Scotland's poor diet, and in tackling unsustainable production and consumption systems for food. The review of the SDAP found there have been weak links between sustainable development, food and health.

Waste production is one area singled out for progress. Although there has been substantial investment in waste minimisation and prevention programmes in recent years, with good progress on household recycling, Scotland's overall production

of waste and reliance on landfill remains a major problem. SDC commends the commitment of the new Scottish Government to a zero waste economy but our review concludes that more concerted action is needed to address the serious issues of waste and the over-use of packaging in food supply. Following on from this Assessment, SDC is looking at issues relating to energy from waste and wider sustainable waste management in Scotland.

There are also challenges in reducing energy use and greenhouse gas emissions from food production and consumption, and these are not adequately addressed by Scotland's current food policy framework.

Based on the findings of our Review, and the research and analysis carried out for this report, the SDC makes the following recommendations to the Scottish Government.

# 3. Policy opportunities in Scotland and emerging recommendations:

### In the forthcoming **National Food Policy**, the Scottish Government to:

- Develop a strategic plan for greenhouse gas emissions across the whole food supply system to support the trajectory for at least 60% cut in CO<sub>2</sub> emissions by 2050 (we commend the Scottish Government for proposing 80% cuts by 2050 in the draft Climate Change Bill and would welcome policies to deliver on this target, but base this recommendation on the current UK Climate Change Bill commitment)
- Work with the farming and food supply chain to develop a long-term vision for low carbon farming; implement policies to support farmers and the food chain in

- finding appropriate solutions to agricultural waste and food waste, including the use of anaerobic digestion
- Harness the choice-editing role of supermarkets, during 2008, to influence consumer awareness of the impact of their food choices and improve diet-related health.
- Support further incentive structures to support increased use of rail freight by supply chains.
- Support promotion of lower carbon transport technologies.

### **Scottish Government** to work towards zero waste, and to:

- During 2008, set out a refreshed Waste Action Plan to move Scotland towards zero waste, identifying the role of retailers and consumers
- Work with SEPA and WRAP to ensure a consistent approach on waste and resource efficiency across the supply chain; and work with retailers, manufacturers and others to develop initiatives to reduce packaging and food waste
- Work together with willing local authorities to increase recycling and phase out single-use carrier bags in retail stores, and publish an action plan showing key milestones towards 2010, 2013 and 2020 targets. This Action Plan should be framed around the move to zero waste and set out how the Scottish Government will go beyond the existing waste stabilisation target.

### In the expected 2008 National Planning Framework, the **Scottish Government** to:

- Maintain current ethos of Planning Action Note 59 giving planning priority to in-town store developments
- Develop land use planning policies to reduce the need to travel and enable sustainable access (including integrated transport planning, provisions for walking and cycling) to town centres and services.

### Welsh policy context

### **Policy background**

Sustainable Development Duty - Section 121 Government of Wales Act 1998

Sustainable Development Action Plan 2004 - 2007

One Wales: A Progressive Agenda for the government of Wales (2007)

Wales Agri-Food Partnership – set up in 1999

Wales Rural Development Plan 2007 – 2013

**Environment Strategy for Wales 2005** 

Planning Policy Wales 2002

Technical Advice Note (TAN) 4 Retailing and Town Centres 1997 - Wales

Wales Waste Strategy 2002: by 2009-10 recycle/compost at least 40% of municipal waste,

with at least 15% each of recycling and composting.

Business and Environment Action Plan

**Nutrition Strategy for Wales** 

Appetite for Life Action Plan

Reducing Inequalities through a Nutrition Strategy for Wales. A Mid-Term Review 2006-07 (FSA)

Quality of Food Strategy – expected in 2008

Transport Wales Act 2006

Wales Transport Strategy 2007

Welsh Freight Strategy consultation launched October 2007, with publication expected in 2008

Wales: A Vibrant Economy (2006)

Farming Strategy – expected in 2008

Local Sourcing Action Plan – expected in 2008

Food and Drink Strategy for Wales - expected in 2008.

One Wales sets out an agenda for Wales, including the following priorities: a prosperous society; living communities; learning for life; a fair and just society; a sustainable environment; a healthy future; and a rich and diverse culture.

Specific commitments of relevance to supermarkets and sustainable food system include:

- Developing a plan to move freight from road to rail
- Developing an all-Wales green jobs strategy
- Establishing a new Climate Change Commission for Wales
- Targets to achieve annual carbon reductionequivalent emissions reductions of 3% per year by 2011 in areas of devolved competence
- Developing a major initiative on local food procurement
- Developing a support programme to promote energy efficiency and renewable energy production on-farm

- Improving targets for recycling with legislation and support for better and more coordinated waste management
- Supporting the campaign for Wales to become a fair trade nation.

### 1.1 Climate Change

One Wales sets out an ambitious strategy for mitigating and adapting to climate change. WAG will set out specific sectoral targets in relation to residential, public and transport areas, to contribute to annual carbon reduction-equivalent emissions reductions of 3% per year by 2011.

There will be a new Climate Change Commission for Wales, to be chaired by the Minister for Environment, Sustainability and Housing. The Commission will assist with the development of new policies and the creation of consensus on climate change.

#### 1.2 Waste

The Wales Waste Strategy sets out how Wales will deliver on the Landfill Directive and increase rates of recycling and composting, and sets targets to works towards achieving minimal waste to landfill by 2026. The Environment Strategy for Wales complements the Waste Strategy and includes measures to achieve a more sustainable pattern of consumption and production.

WAG is working with WRAP, which it part-funds in Wales, to reduce packaging in the retail sector and deliver on the Courtauld Commitment, a UK-wide agreement.

### 1.3 Agriculture

The Rural Development Plan 2007 – 2013 is the framework for a range of rural development measures and schemes run by WAG. It was submitted to the European Commissions in 2007 and awaits approval.

Farming Connect, delivered by the Welsh Assembly Government (WAG), supports farmers throughout Wales.

The Department for Rural Affairs is working closely with the SDC on a range of issues concerned with sustainable food production, and alongside Defra and the other devolved administrations on the DEFRA-led Food Chain Programme.

Six new sectoral Strategies are under development, providing a framework for the Action Plans that lead from this initial work. The Action Plans will in turn give a focus for the projects to be delivered under the appropriate Measures of the Rural Development Plan 2007-2013. The sectors are:

- Dairy
- Red meat
- Horticulture
- Organic
- Alternative land use
- Fisheries and Aquaculture.

### 1.4 Diet-related health

A cross-cutting Quality of Food Strategy is in development, stemming from a 2006 National Assembly for Wales motion<sup>319</sup> for WAG to improve the quality of food consumed in Wales.

The consultation document<sup>320</sup> commits to a Welsh Food debate and a Quality of Food Action Plan, focusing on health, sustainable development, social justice and education. It will also contribute to the development of a revised Agri-Food Strategy. The Strategy will be underpinned by the ethical principles of justice, wellbeing and accountability, with seven priority issues: health, safety, environment, fair trade, economic viability, accessibility/ affordability and culture.

FSA Wales has recently published a review of nutrition and health in Wales, Reducing Inequalities through a Nutrition Strategy for Wales. A Mid-Term Review (2006-7).321

#### **1.5** Food

WAG has a strong record of supporting local food initiatives, including through initiating the Agrifood partnership in 1999, and since developing various trade development programmes to ensure the support is delivered to businesses to maximise opportunities in the public and private/retail sectors.

WAG is engaged with the major supermarkets to encourage local purchasing, which supports the rural economy and, particularly if produce is seasonal, can deliver a low carbon food system. The major supermarkets have responded to customer demand by introducing initiatives to increase the number of local lines listed and in the appointment of Welsh regional buyers with responsibility for local sourcing.

The forthcoming 2008 Food and Drink Strategy will outline new schemes for the next six years to support producers and processing businesses develop their organisations and market their products.

WAG, together with UK government and consumers, have put pressure on supermarkets to deliver on the sustainability agenda. WAG aims to facilitate improvements to some of the own-label products which are made by manufactures within Wales, large and small, by supporting the industry to help them investigate technical issues, energy efficiency, waste reduction and eco-design of their products and processes.

### 2. Current government approach

In our review of Sustainable Development in Wales: From pioneer to delivery,<sup>322</sup> the SDC congratulates the Welsh administration for its pioneering commitment to sustainable development, but challenges WAG to deliver on this commitment and become an unequivocal champion for the five principles and four priorities at the heart of One Future: Different Paths

We welcome the Quality Food Strategy and commend WAG for integrating public health, social justice and sustainable agriculture objectives in its development.

In our response to the Transport Strategy consultation,<sup>323</sup> we commend the decision to review freight grants to help encourage the shift of freight from road to rail and coastal shipping, and would like to further support measures to improve the sustainability of the freight and distribution network.

Based on the UK-wide analysis in this review and opportunities for influencing policy development in Wales, we make the following recommendations to the Welsh Assembly Government.

# 3. Policy opportunities in Wales and emerging recommendations

**Department for Rural Affairs** to place sustainable food production and consumption principles at the core of the forthcoming **Sectoral Strategies**, including:

- Reduction in water use to be given a high priority in definition of, and support for, a sustainable food and farming system
- Development of improved sustainability standards as the baseline for production standards, working with Defra and other devolved administrations on the potential for a 'green tractor' for domestic production.

Welsh Assembly Government to deliver on its commitment to 3% reductions in carbonequivalent emissions, and to:

- During 2008, develop a strategic plan for greenhouse gas emissions across the food supply system in Wales to support the trajectory for at least 60% cut in CO<sub>2</sub> emissions by 2050
- Support further incentive structures to support increased use of rail freight by supply chains
- Support promotion of lower carbon transport technologies.

**Department for Rural Affairs**, in the forthcoming Farming Strategy, to:

- Work with farming and food supply chain to develop long term vision for 'low carbon' farming, and show how this fits into the 2020 strategic plan
- Develop roadmapping approaches in Wales to achieve sector greenhouse gas emissions reductions, building on the product roadmapping work carried out by Defra, including for the dairy sector
- Facilitate improvements in local supply chains – infrastructure (eg hubs) and skills (eg marketing, accessing retailers, advice on meeting standards requirements)
- In 2008/9 raise the profile of skills issues through Farming Connect (reflecting sustainability challenges) for buyers, producers, logistics workers.

# Department for Environment, Sustainability and Housing, building on the Wales Waste Strategy 2002, to:

- During 2008, set out a clear strategy to move Wales towards zero waste, identifying the role of retailers and consumers, and policies to reduce waste at source (not just downstream recovery and recycling) and progress towards closed loop recycling and materials systems in business
- Work with the Environment Agency and WRAP to ensure a consistent approach on waste and resource efficiency across the supply chain; and work with retailers, manufacturers and others to develop initiatives to reduce packaging and food waste
- Work together with willing local authorities to phase out single-use carrier bags in retail stores.

# **Department of Public Health and Health Professions**, in the forthcoming **Quality Food Strategy** to:

 Harness the 'choice-editing' role of supermarkets, during 2008 to influence consumer awareness of the impact of their food choices and improve diet-related health.

**Welsh Assembly Government**, in policies to be developed as part of implementation of **One Wales**, to:

- Maintain current ethos of Technical Advice Note 4 giving planning priority to in-town store developments
- Encourage local transport policies to support the provision of bus routes, safe cycle lanes and walk-ways to shopping centres, both in-town and existing out of town shops.

## **Northern Ireland policy initiatives**

Northern Ireland's first sustainable development strategy, First Steps towards sustainable development,<sup>324</sup> was launched in March 2006, and sets out how Northern Ireland will deliver sustainable development within the context of the UK shared framework.

In its first Strategic Plan<sup>325</sup> covering 2006-2011, Northern Ireland's Department of Agriculture and Rural Development, sets itself goals of achieving a competitive industry, with strong social and economic infrastructure in rural areas, enhancing animal, fish and plant health and welfare, and developing a more sustainable environment. Sustainable development is the over-arching driver of change, and the strategy has a goal of improving the competitiveness of the Northern Ireland agrifood industry.

The Rural Strategy,<sup>326</sup> which delivers Northern Ireland CAP policy, will be implemented on the basis of an inclusive approach to sustainable rural development and the integration of policies across government. It is a major initiative and a commitment to future development of sustainable rural communities.

The Food Strategy Implementation Partnership (FSIP)<sup>327</sup> was established in November 2004 by the Ministers responsible for Northern Ireland Agriculture and Economy. The FSIP provides direction and an industry focused steer to the government and for the agri-food industry. The strategy aims to assist the food industry in Northern Ireland achieve its fullest economic potential, focusing in key areas such as market understanding and development, innovation, capability development and supply chain management.

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**Drafting team** Sue Dibb, Sara Eppel, Tim Lang and Helen Rimmer

**Art Direction and design** Andy Long

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