

4-a-week

Changing food consumption in the UK to benefit people and planet

How we shop, what we eat, and what we throw away are becoming frontline issues in the effort to tackle climate change. In the UK, we need to change how and what we consume, while helping people living in poverty around the world to improve their lives. This paper sets out four ways in which we can adapt our consumption to achieve both environmental and social sustainability and justice. These are: waste less; eat less meat and dairy; buy more Fairtrade products; and buy more produce from developing countries.

Summary

Food shopping may seem an innocent, even mundane, chore. But the food we buy every week can have huge impacts on people and environments seemingly worlds away from our regular dash round the shops. The futures of some of the world's poorest people and of the global environment are intimately linked to the contents of our shopping baskets.

Our food choices can provide a vital source of income for millions of poor farmers and workers around the world. But our food choices also affect climate change – around one-fifth of greenhouse gas (GHG) emissions in the UK are related to the food we buy. If unchecked, climate change will increasingly undermine global food production, reverse decades of development, and increase poverty and suffering around the world. Our current use of the world's resources is unsustainable; we are rapidly entering an age of scarcity (of fertile land, of water, of energy, and of atmospheric resources). If the world's poorest people are to realise their right to development then rich countries will have to dramatically reassess their consumption patterns. We must all consume our food in a way that guarantees both environmental and social justice.

But what should consumers *actually* do? Many people in the UK recognise that changing how they consume can make a difference, but we are constantly bombarded with complex and conflicting advice on making ethical food choices. This paper cuts through the confusion to show how four simple actions every week can help guarantee a healthier planet and a better future for some of the world's poorest people. The 4-a-week are:

1 Waste less food

Every year the UK throws away over three times more food than the whole world provides in food aid to hungry people. Much food is wasted in food supply chains, but a third of all wasted food is thrown away by consumers: as households we bin one-third of all the food we buy. Eliminating unnecessary household food waste could reduce GHG emissions by the equivalent of taking one in every five cars off UK roads.

We can all help to ensure less food is wasted by not overbuying food that we will not eat before its use-by date, and by being more resourceful with leftovers. This will save money and avoid environmental damage for people across the globe. Businesses, too, must play their part by sourcing food responsibly and ensuring their purchasing practices are not contributing to overproduction or excessive packaging.

2 Reduce consumption of meat and dairy products

Growing demand for meat and dairy products affects both people and planet. Global meat and milk production is expected to double by 2050. This is likely to reduce the land and resources available for producing other foodstuffs and push future food prices further beyond the limits of affordability for the world's poorest people. With livestock already contributing more GHG emissions to the atmosphere than all of the world's

transport combined, reducing demand for meat and dairy produce is perhaps *the* most significant action that we can take to reduce the impact of food production on both people and planet.

3 Buy Fairtrade produce

Fair Trade has been an amazing success story, transforming the lives and prospects of millions of poor producers, and educating new generations of Northern consumers in issues of social responsibility and globalisation. Fair Trade pays poor producers a fair and stable price and enables them to invest in projects to support their wider communities. As a result, they are able to improve their business and marketing skills, send their children to school, and if they choose, diversify their businesses away from farming. Yet despite extraordinary growth and retailers offering an increasingly wide choice of Fairtrade products, Fair Trade remains a relatively small market. On its own, it can't fully address the crisis faced by millions of small-scale farmers and workers whose livelihoods are threatened by volatile commodity prices and unfair competition from rich countries. For these people, access to high-value mass markets such as the UK can be vital for escaping from poverty.

4 Buy other foods from developing countries

Concern is increasingly being raised about the environmental implications of sourcing food from distant countries. While we all need to be concerned about the environmental impacts of the food we buy, we should not be boycotting produce from developing countries. Here's why:

First, the UK imports only a small proportion of its food from developing countries, and this trade provides vital incomes for millions of poor farmers and workers – 1.5m in Africa alone. Some people argue that developing countries should be growing their own food rather than exporting it, but there is clear evidence that agro-exports improve poor people's income and food security.

Second, the distance food travels provides a poor measure of its total environmental impact. Because emissions are generated throughout food's lifecycle from 'farm to fork', and not just by transporting it, switching food sources to reduce 'food miles' does not guarantee a reduction in the volume of emissions; transport accounts for just 12 per cent of food's emissions. Although labour conditions and contracts in developing countries are not always as stable or as fair as they should be, these will not be improved through boycotting food from poor countries. Instead consumers should buy produce from developing nations and pressurise supermarkets and other buyers to ensure that the rights of workers in their supply chains are protected and to guarantee fair prices, reasonable lead times on orders for produce, and stable contracts.

Introduction: What has food consumption in the UK got to do with poverty and climate change?

Cast an eye over the shelves in your kitchen or local supermarket, and you will quickly see how the world has become interconnected through trade. Now climate change means that such connections matter more than ever for both people and planet.

Nothing exemplifies the extremes of social and economic inequality like food. For some of the poorest people in the world, food is a scarce and precious resource allowing them to survive from one meal to the next. For others, food is a form of overindulgence and gluttony, clogging up arteries and health-care systems. The recent food crisis has increased the number of hungry people in the world to 967 million.¹ Compare that with the 1.6 billion people who are overweight and the 400 million who are clinically obese.² For many millions more, who are fortunate to have enough to eat and (generally) do not overindulge, food is a daily source of pleasure.

Our eating habits have impacts that go way beyond personal enjoyment and well-being however, often affecting people and environments seemingly worlds away from our weekly dash round the food shops.

Worldwide, 2.6 billion people's livelihoods depend on agriculture – nearly half of humanity.³ Some of these women and men are self-sufficient in food, and many sell their produce to domestic markets. But for many other farmers, farm labourers, processors, and traders, high-value export markets are a vital source of income. These markets include those for fruit and vegetables, along with other commodities such as tea, coffee, cocoa, spices, nuts, and rice and other grains. For many of these products, the UK is a vital market.

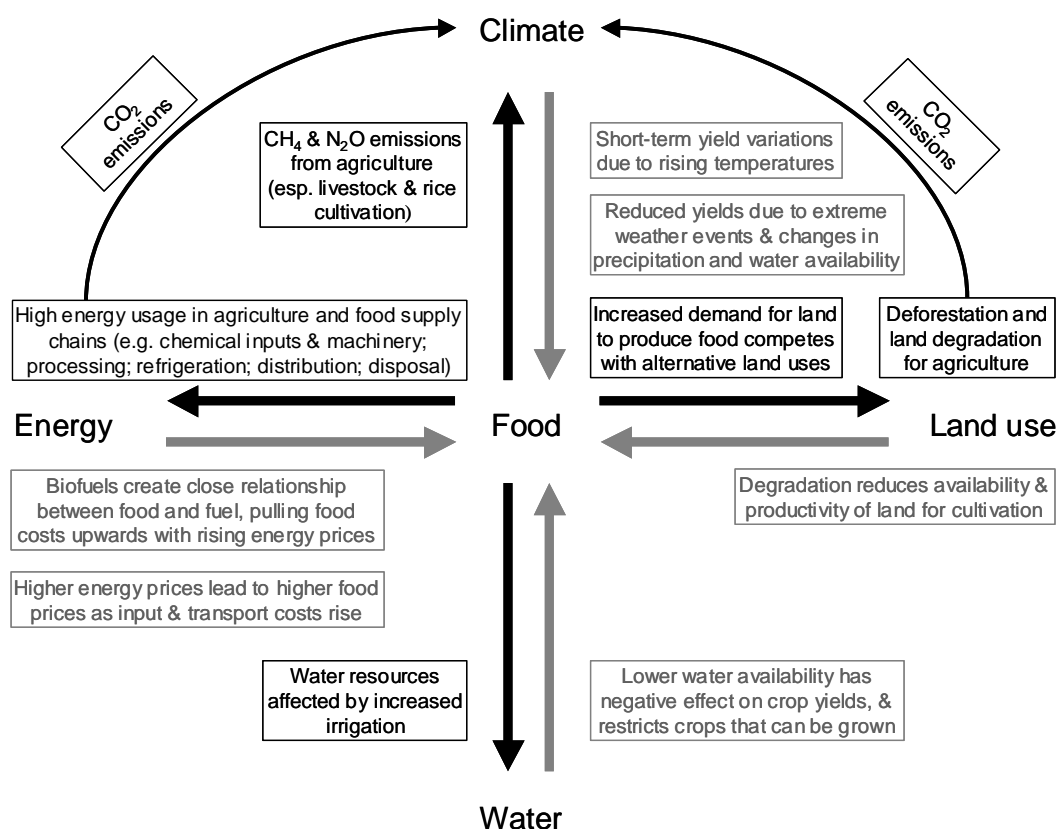
But food production and consumption also drive climate change and other forms of environmental degradation. Food accounts for around one-fifth of GHG emissions in the UK⁴ (and around a third of EU emissions),⁵ making food a key battleground in the fight against runaway climate change. Agriculture is the single largest contributor, accounting for two-fifths of the emissions from food consumed in the UK.⁶

Climate change, in turn, increasingly affects food production, particularly in poor countries, reversing decades of development,

increasing poverty and suffering, and undermining food security. And because poor women in rural areas tend to do the jobs (including agricultural production) that are most affected by changes in weather, they will suffer the most. When clean water becomes harder to find during a drought, or when floods destroy crops, it's up to women to find solutions. Agriculture will be especially hard hit in seasonally dry and low latitude regions that are home to most of the world's poorest communities. There, even a slight increase in average temperatures will adversely affect millions of farmers, pastoralists, and artisan fisherfolk, who will suffer from both lower yields and higher vulnerability to extreme weather events such as droughts or hurricanes.⁷ Africa, Latin America, and India will suffer the most severe losses.⁸

The world's food and environmental systems are intertwined in other ways too, summarised in Figure 1. While all are undeniably important, this paper focuses predominantly on the climate linkages.

Figure 1: Food's relationships with the environment⁹



We are rapidly entering an age of scarcity; our current use of the world's resources is unsustainable. The limits to our current patterns of growth will be thrown into ever sharper, more painful, relief. As the equivalent of two more Chinas are added to the world's population by 2050,¹⁰ mounting pressure will be placed on the world's remaining fertile land, water, energy, and atmospheric resources. If the world's poorest people are to realise their human rights to development, then rich countries will have to dramatically reassess their consumption patterns. Sustainable consumption must guarantee both social and environmental justice. Not only must we drastically increase the efficiency with which we use the earth's resources, we must use them in a manner that is equitable, ensuring that poor people's rights are put at the heart of our actions. Many people in the UK recognise that they can take ethical action by changing how they consume – the extraordinary success of the Fair Trade movement shows that. But going further can be hard – we are constantly bombarded with complex and conflicting advice on making ethical food choices. This paper shows how we can both increase the resource efficiency with which we consume, and support poor producers in the developing world. These twin goals can be advanced by focussing on four areas:

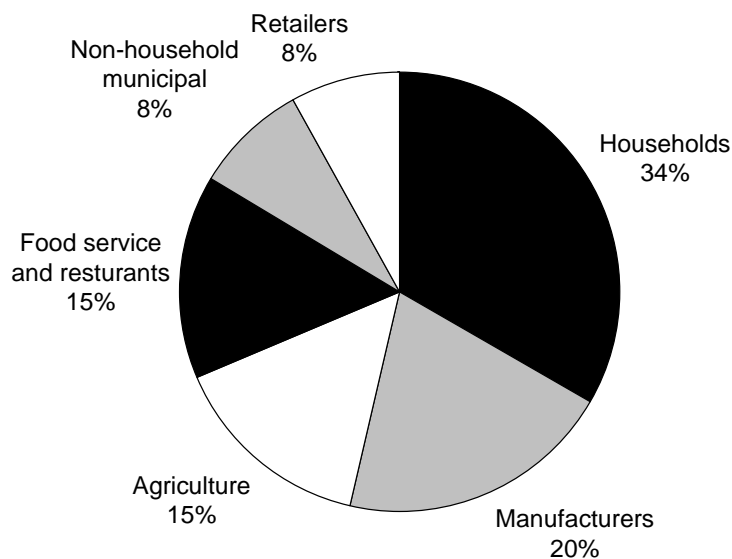
- 1 Wasting less food
- 2 Reducing consumption of meat and dairy products
- 3 Buying Fairtrade produce
- 4 Buying other foods from developing countries

Consumers alone cannot solve the double challenge of climate change and poverty – government, industry, and citizens alike all have a part to play. But taking these four simple actions every week can help to ensure that we are all eating for the benefit of both people and planet. Much as eating five portions of fruit and vegetables every day, 'five a day', can set us up for a healthier personal lifestyle, '4-a-week' offers a stepping stone towards a healthier planet and a better future for some of the world's poorest people.

1 Food waste

The UK throws away over three times more food in a year than the entire volume of global food aid.¹¹ This amounts to around 20 million tonnes of food each year. Household food waste is the single biggest contributor (6.7 million tonnes), accounting for a third of all the food disposed of in the UK (Figure 2).

Figure 2: Sources of UK food waste¹²



Much food is wasted before it even makes it through the nation's front doors, either succumbing to exacting retail quality and presentation standards, or being lost elsewhere in the supply chain. Over-ordering on the part of retailers to ensure constant supply, and overproduction on the part of suppliers to feed this demand compound the problem. In addition, EU legislation (due to be largely repealed in July 2009) has added further to the problem by preventing misshapen and oddly sized fruit and vegetables from being sold in Europe. Currently EU marketing standards lead to one in five fruit and vegetables being rejected by food shops.¹³

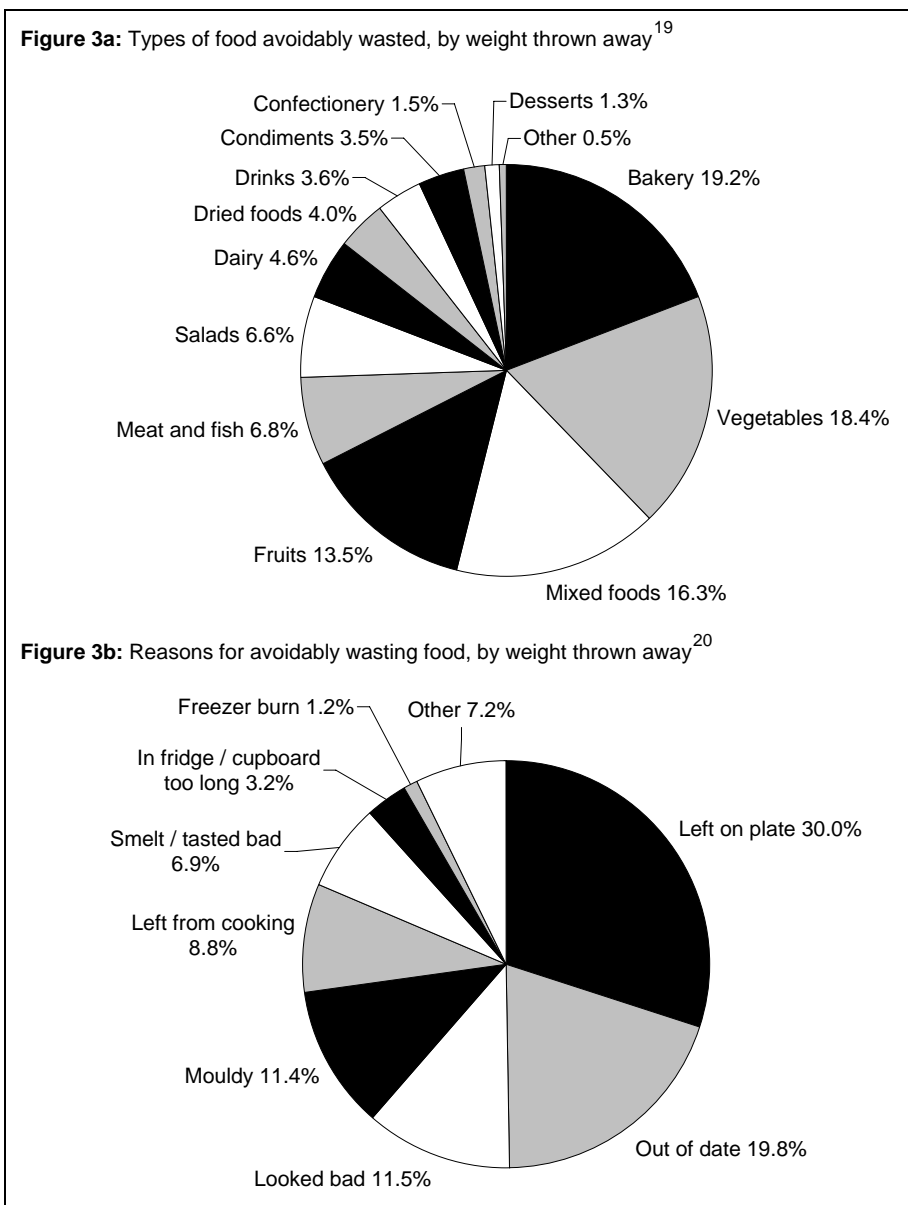
Of the food that we do bring into our homes, we throw out one-third as waste. Even those households that are adamant they waste no food at all are unnecessarily throwing away an average of 88 kgs of avoidable food waste per year. And most of us are throwing away much, much more than this; most of which could have been eaten if it had been managed better (Figure 3).¹⁴

The cost of food waste

The nation's wasteful habits are incredibly costly: each year the UK as a whole pays for but does not eat £10 billion of good food, or £420 per household.¹⁵ Yet this cost is borne not only by our personal finances, but also by our global environment. If growing global demand for food is to be met and we are to stand a chance of living within increasingly tight environmental constraints, then the profligate waste in the current food system must be drastically reduced.

Every tonne of household food waste is responsible for 4.5 tonnes of carbon dioxide equivalent (CO₂e).¹⁶ These avoidable emissions come not just from the gases released as waste composts and decomposes in landfill (waste disposal only accounts for 2 per cent of food consumption-related emissions in the UK), but also from the unnecessary resources that are ploughed into the redundant production, process, transport, and disposal of products that are never eaten. Avoidable household food waste unnecessarily generates 18 million tonnes of CO₂e every year.¹⁷ Eliminating this waste alone would deliver emissions reductions equivalent to taking one in every five cars off UK roads.¹⁸

Figure 3: Avoidable food waste



Avoiding food waste

Over the past two years, 1.8 million households have taken steps to reduce the amount of food they throw away,²¹ and across all sectors, two million tonnes of CO₂e have been saved each year by reducing food waste.²² For consumers, simple steps such as not overbuying food that won't be eaten before its use-by date, and being more resourceful with leftovers can make all the difference. In industry, the Courtauld Commitment between the government-funded Waste & Resources Action Programme and major grocery organisations,

which commits signatories to tackle food waste, has resulted in zero growth in food packaging in 2008 (despite growing sales), and a further commitment to help reduce the amount of food households throw away by 155,000 tonnes by 2010, against a 2008 baseline.²³

This is great news, but waste reduction towards the end of the food supply chain will not be sufficient on its own. Economic relations and structures throughout the supply chain must also be tackled. Waste, overproduction, and resource inefficiency throughout the food system can all be addressed through the same means that would help to ensure that producers and workers benefit from stable and fair trading relationships: greater transparency and clear and fair terms of contract along the length of supply chains.²⁴

2 Meat and dairy

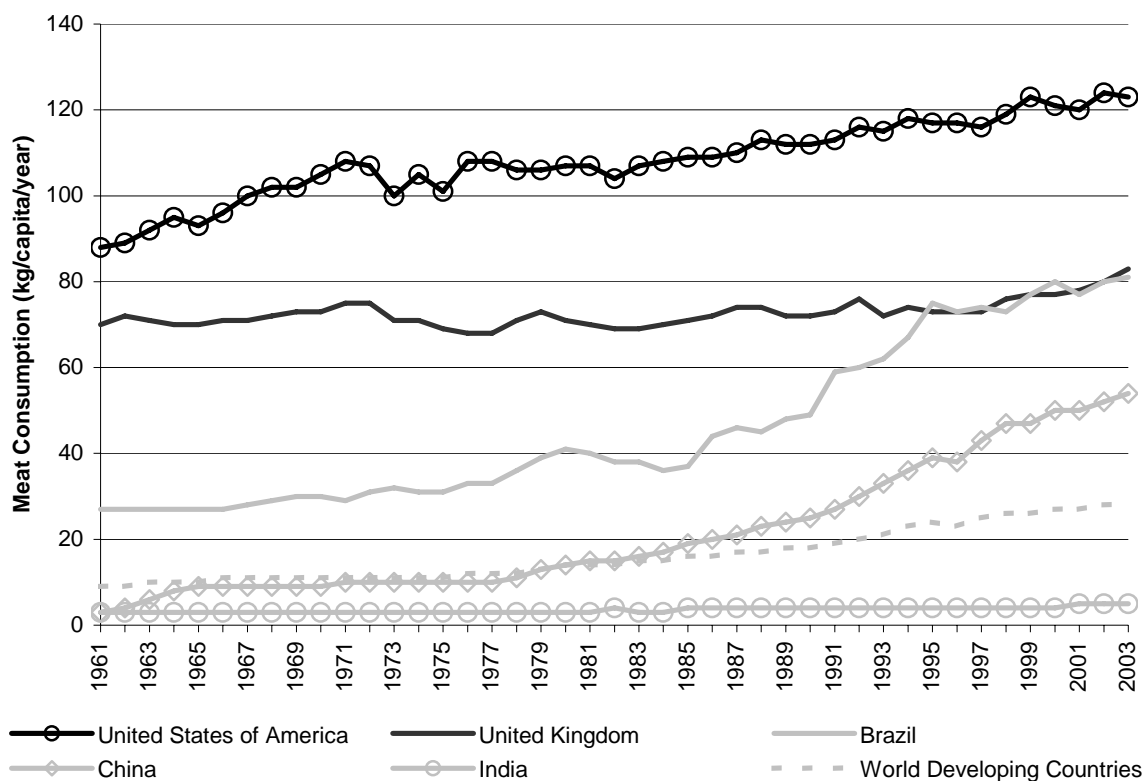
Growing demand for meat and dairy products (driven by economic growth, urbanisation, and rising affluence in both developed and developing countries)²⁵ has significant social and environmental consequences. However, it is not demand in developing countries that we should be primarily concerned about; per capita consumption in developed countries is still much higher (Box 1).

Increased demand for grains to feed livestock, coupled with the burgeoning demand from biofuels for feedstocks, is likely to push future food prices further beyond the limits of affordability for the world's poorest people.²⁶ The recent rises in food prices have already caused misery for millions, but future price rises and pressures on food supplies are likely to be increasingly compounded by, perhaps even driven by, rising global demand for meat and dairy products; feeding livestock is much less resource-efficient than growing grains for human consumption.

Environmentally, ever-increasing amounts of land, water, energy, and chemicals used to meet the world's increasing appetite for animal products all have profound impacts. The UN's Food and Agriculture Organisation (FAO) deems the livestock sector to be 'one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global'.²⁷ Although far from being the only environmental issue associated with meat and dairy consumption, climate change is one of the most significant.

Although demand for meat is rising in emerging economies, the UK still consumes significantly more meat per person (83 kg per year in 2003) than China (54 kg per year) (Figure 4). Demand is even higher in the USA (123 kg in 2003), and has risen rapidly in Brazil over the past two decades, but consumption in India, despite being the world's leading milk producer,²⁸ is very low (5 kg per person in 2003).

Figure 4: Per capita annual meat consumption in developed and developing countries²⁹



Box 1: Contraction and convergence

With meat and milk production predicted to double by 2050,³⁰ one proposed response is to reduce global meat consumption to just less than 33 kg per person per year by 2050 under a system of contraction and convergence.³¹ This would simply prevent an *increase* in emissions from livestock. The proponents argue that such a contraction and convergence in meat consumption is unlikely to harm people's health and should bring substantial health benefits, including reduced risk from heart disease and various cancers in high-income countries, and reduced strokes and childhood stunting from modest, rather than low, consumption in low-income countries.³²

Contraction and convergence was first proposed as an equitable means of cutting emissions from all sectors affecting climate change. The basic premise is that a sustainable level of per capita emissions (or in this case, meat consumption) is set for a future date, by which time all countries must be under that limit. Those already under the limit are permitted to increase up to the limit. Contraction and convergence would ensure equal rights for everyone in the world to eat a modest amount of meat, though it would leave people in developing countries with significantly less right to eat meat (over 33 kg) in the intervening period.

Climate impacts

Meat and dairy products account for approximately half of food's GHG emissions³³ and 8 per cent of all UK GHGs.³⁴ At the global level the FAO calculates that livestock generate more GHG emissions than all the transport on the planet – nearly a fifth of all anthropogenic GHG emissions.³⁵ Within the agricultural sector alone, livestock account for nearly 80 per cent of all GHGs.³⁶

Belching cows, sheep, and goats (ruminants) emit large volumes of methane.³⁷ This matters because methane is 25 times more potent a GHG than carbon dioxide.³⁸ Manure from both ruminants and other animals such as poultry and pigs is another major GHG contributor, producing nitrous oxide – which has 298 times the global warming potential of carbon dioxide (and is also produced by fertilisers³⁹). Yet these direct emissions are only part of the story. Deforestation, both to directly create new pasturelands and to indirectly create arable land on which to grow animal feeds, is responsible for about a third of livestock emissions at the global level.⁴⁰

Rather than growing staple grains to feed the world's rapidly growing population, around a third of all arable land in the world is used to produce animal feed crops.⁴¹ The Amazon rainforest has been a major casualty of the world's demand for meat and dairy. Seventy per cent of previously forested land in the Amazon is now pasture land, and much of the rest is covered by feedcrops.⁴² In Brazil, the livestock sector is estimated to be responsible for 60 per cent of the country's GHG emissions, including through land-use change and land degradation.⁴³ Nearly 80 per cent of UK soybeans, a major source of protein in animal feed, are imported from Brazil;⁴⁴ so there is a strong link between meat and dairy consumption in this country and deforestation of the Amazon.

In terms of direct emissions, cows, sheep, and goats also convert feed energy into animal protein energy much less efficiently than pigs and poultry. For example, to produce a 1 kg gain in live weight, cattle in feedlots require around 7 kgs of grain, pigs need 4 kgs, poultry just over 2 kgs, and herbivorous species of farmed fish (such as carp or tilapia) require less than 2 kgs.⁴⁵ In general, the more nutritional energy that is lost through the food chain, the more GHGs are emitted. Lifecycle analyses, which look at the total emissions generated from production through to consumption, also consistently show ruminants to have a heftier emissions hoofprint⁴⁶ – one recent study from the USA found red meat to be 150 per cent more GHG intensive than chicken or fish.⁴⁷

However, such studies, while capturing inputs such as feeds and fertilisers, do not reliably account for emissions arising from the

‘second-order’ land-use changes, such as deforestation, caused by producing animal feeds. Pigs and poultry are far more dependent on cereal-feed than ruminants. As they cannot survive on grazing pasture alone, (unlike cows, sheep, and goats), they are implicitly responsible for greater land-use change impacts. This makes the GHG picture between different types of livestock more complex than the simple ‘beef bad, chicken better’ message suggests, though industrialised cattle production also currently relies heavily on cereal and oilmeal feeds.⁴⁸

Farming systems

From an emissions perspective, the case for one form of farming system over another is contested. Total emissions (especially methane emissions) from intensive production methods are much lower than those from extensive farming (large areas farmed with minimum labour and outlay), but this in part reflects the far more widespread use of extensive systems throughout the world.⁴⁹ One study concludes that extensive systems produce fewer emissions per unit area, but notes that widespread extensification would significantly reduce overall levels of agricultural production. Other studies point to the mitigation potential of anaerobic digestion (a renewable energy source) from animal waste, which is better served by the concentrated inputs available from intensive production. A further study concludes that the quality of farm management (e.g. the level of nitrogen fertiliser inputs applied) is more important than the intensity of production.⁵⁰

On marginal uplands in the UK, which are often unsuitable for arable farming, livestock, at appropriate stocking densities, can actually provide environmental services. They can help to keep coarse grasses under control, allowing other wildlife to flourish.⁵¹ Peatland is the largest carbon sink in the UK; moderate levels of livestock grazing that inhibits the growth of shrubby vegetation can prevent the peat from drying out and can maintain its effectiveness as a carbon sink.⁵²

Farming systems also have a bearing on animal welfare, on local biodiversity and pollution, and on small-scale farmers’ ability to access markets on equitable terms. In developing countries where energy, chemical inputs, and credit are less available than labour, low-input extensive systems may be the only viable option.

More important than focussing on the pros and cons of particular production systems, however, is to improve the sustainability of *all* farming systems. We need to ensure that consumption patterns are sustainable, that food production is resource efficient, and that marginalised farmers are not disadvantaged (Box 2).

Box 2: Reduced consumption and farmers' livelihoods

An estimated 42 per cent of people living in poverty depend on raising livestock for some or all of their food.⁵³ Although many are pastoralists (livestock herders) these people are responsible for very few GHG emissions compared with people in developed countries such as the UK, yet they will feel the effects of climate change and other environmental changes most severely. For example, some pastoralists have been forced to become nomadic because desertification means the land is unable to support their livestock for extended periods. These farmers would be unaffected by a contraction of consumption in the developed world as they do not supply their products to international markets.

But what of the small-scale farmers and workers in the UK? A contraction in meat and dairy consumption is clearly necessary, but there is a danger that small-scale farmers could have their marginal existence further squeezed by such actions. Oxfam has worked with farmers in the Peak District who earn less than £10,000 a year – their plight is typical of the fate of small farmers across the UK. While European grants and subsidies have clearly helped the rich – the largest 2 per cent of UK land holdings received around one-fifth of Common Agricultural Policy (CAP) subsidies – small farmers have been fundamentally failed.⁵⁴ And recent government figures confirm that farm incomes in less favoured areas have continued to fall by almost 40 per cent in the past three years.⁵⁵

Yet contraction in demand for meat and dairy need not have negative consequences for small-scale farmers. Instead they could actually benefit from consumption changes if these were to harness the eco-efficiencies of livestock; to ensure small-scale farmers are paid a living wage; and to result in large-scale farmers with bloated subsidies absorbing the impacts of reduced demand.

Meat versus dairy

Separating out the relative climatic impacts of meat and dairy is problematic since the beef and dairy sectors are highly interlinked. Two independent studies, however, give an indication of their comparative effects. One, an EU study, concludes that dairy products are the second most important food grouping in terms of environmental impacts behind meat and meat products;⁵⁶ the other, a Netherlands-based study, finds that meat and fish account for 28 per cent of food-related emissions, whereas dairy accounts for 23 per cent.⁵⁷ Although the exact proportions will differ by country, it is clear that dairy production is highly GHG intensive: a lacto-vegetarian diet may not necessarily be less GHG intensive than a meat-based one.⁵⁸

Fish

On the face of it, fish have a lower GHG impact than many meat products.⁵⁹ One lifecycle assessment suggests that the climatic impact of fish consumption is similar to that of eating chicken and eggs.⁶⁰

However, as with lifecycle analyses of meat and dairy products this fails to take account of second-order land-use changes that occur as a result of producing feed for farmed fish. Some of this feed comes from oilseeds such as soy, and some comes from fishmeal (which is also used as feed and fertiliser in agriculture) created from dried fish and fish-waste. In some cases, therefore, rather than alleviating pressure on wild stocks, fish farms can contribute to the depletion of wild stocks. And as wild stocks decline they will eventually have to be replaced by oilseeds as feed sources for fish farms, increasing their second-order impacts.

The Marine Stewardship Council's (MSC) eco-labelling provides a good indicator of well-managed and sustainable wild-capture fisheries, but it is somewhat limited in scope,⁶¹ doesn't cover farmed fish, and fails to take account of associated GHG emissions. Nonetheless, in the absence of other reliable information, MSC certification provides a useful indicator of sustainable sources of fish.

Reducing meat and dairy

With global meat and milk production expected to double by 2050, and with livestock contributing more to global GHG emissions than every plane, truck, and car on the Earth, reducing demand for meat and dairy produce is perhaps *the* most significant action that can be taken to reduce food's impacts on both people and planet. A drastic overall reduction in consumption of *all* types of meat and dairy products is urgently needed. Switching between meats or from overconsumption of livestock products to overconsumption of fish does not afford a solution.

Achieving such a change may well have health and economic benefits for consumers, but the economic conditions of producers also need to be factored in. To prevent further serious harm to poor people, struggling producers, and the environment, not only should consumers undertake to eat less meat and dairy, but also the government should consider ways to support small-scale farmers and develop targets for emissions reductions from livestock. These targets must outline the reductions necessary from consumption and from livestock management, and should include a roadmap for achieving emissions reductions in line with the overall reductions set out in the Climate Change Act 2008.⁶² The government should also ensure that small-scale farmers affected by changing consumption receive sufficient support, such that they are able to earn a living wage.

3. Fair Trade

Fair Trade has moved from the fringe to the mainstream with astonishing speed: global sales are now €2.3bn (£1.6bn),⁶³ educating new generations of northern consumers in issues of social responsibility and globalisation, and transforming the lives and prospects of millions of poor producers. Guillermo Vargas Leiton, a Costa Rican Fairtrade farmer, told the House of Commons during Fairtrade Fortnight 2002: 'When you buy our coffee you are not just buying our coffee but supporting our democracy'.

The Fair Trade movement started in the Netherlands in the 1980s. In 2000, Garstang, a small market community in Lancashire, became the world's first Fairtrade town, following eight years of campaigning by the town's Oxfam group. There are now over 500 Fairtrade Towns⁶⁴ including San Francisco, Rome, and London, and in 2008 Wales became the first Fairtrade nation. Goods licensed by the Fairtrade Labelling Organisation directly support the livelihoods of 7.5 million women and men from 632 producer groups in 58 developing countries. They are sold in more than 60 countries across the world.⁶⁵

Fairtrade products provide producers with:

- A fair and stable price that covers the cost of sustainable production.
- An additional Fairtrade premium to be invested in social, environmental, or economic development projects as determined by producer groups.
- A long-term supportive trading relationship founded on partnership and delivering mutual benefits to trade partners.
- Where requested, pre-financing to support producers' production and harvesting investments.

Additionally, Fair Trade means that important investments can be made in women's income-generating activities unrelated to farm activities. Women are therefore able to strengthen their income, business experience, and position in the family.⁶⁶

For their part, all Fairtrade-certified producers are required to comply with the international Fairtrade environmental standard. This standard requires producers to ensure that they protect the natural environment and make environmental protection a part of farm management. Producers are also encouraged to minimise the use of energy, especially energy from non-renewable sources.

Box 3: Fairtrade coffee and cocoa

Fairtrade coffee, Honduras⁶⁷

With support from one of Oxfam's local partners, a rural community in Sesesmil, Honduras have transformed themselves from conventional farmers into international coffee traders within seven years. Certified as Fairtrade and organic they are guaranteed a higher price for their coffee and are no longer at the mercy of the fluctuating Honduran coffee market. Twenty-two families benefit from the work of their coffee co-operative. Now they all have food security, better nutrition, and an income. As a result, the community have been able to invest in a new school and a community centre.

Jose Antonio Hernandez, a coffee farmer, says: 'The work of the co-operative has translated into progress for my family. My wife used to be a shy woman. She used to stay in the kitchen all day. She never left the house. Now she is a really good trader and she sells the coffee at the local market in Copan Ruinas'.

Don Juan, president of the co-operative, says: 'We used to work as individuals and sell our coffee to middlemen. The middlemen would come to our farms and buy the coffee very cheaply. They were the ones making the profits. They knew the buyers and could sell it on for much more. Now we are doing much better. We have learned a lot and found our own international buyers'.

Kuapa Kokoo Fairtrade cocoa, Ghana⁶⁸

Cecilia Appianim is the finance secretary of the Ghanaian Kuapa Kokoo cocoa co-operative that part-owns Divine Chocolate:

'Fair Trade has helped us a lot. Because of Fair Trade, women can come out boldly and take part in every event. Before it was not like that. Before we would stay at home and watch the men. And we would work with our husbands and they would take the money, put it in their pockets, and when it came time to buy food or pay school fees they would say the money is gone. But Kuapa has opened our eyes to see that everything should be 50-50. So if a man has one vote a woman has one as well. If the men come together to make a decision then the women are there to take part as well. So now we are empowered and the men cannot cheat us again.'

'Also because of Fair Trade we have many projects for women. We make soap, t-shirts, batik, we grow other foodstuffs and sell in the market and then put some money into the credit union for hardship times or to pay our children's school fees. My appeal to the women in the UK is to support Fair Trade and to support Divine. Then we can get more premium to do even more projects for women in Ghana.'

Fair Trade is often criticised for propping up prices and encouraging producers to continue farming otherwise unprofitable commodities, thereby depressing market prices through excessive supply.⁶⁹ But Fair Trade neither creates a surplus nor locks producers into particular commodities. The reality, as shown by the case studies in Box 3, is that as a result of receiving a fair price, producers are able to

improve their business and marketing skills, send their children to school, and diversify their business if they choose to. Despite its extraordinary growth, the Fair Trade market is, as yet, not sufficiently large to exert an influence over world market prices or to create artificial surpluses.

One in four bananas now sold in the UK is a Fairtrade banana.⁷⁰ UK retail sales of all Fairtrade produce grew 72 per cent in 2007 alone, reaching £493m.⁷¹ But bananas and coffee still dominate sale values, and for every £395 spent on all food and drink by UK consumers only £1 is spent on Fair Trade.⁷² Consumer research conducted by Mintel suggests this is partly due to food stores failing to satisfy shoppers' demand for Fairtrade products.⁷³

On its own, Fair Trade can't fully address the crisis faced by millions of small-scale farmers and workers whose livelihoods are threatened by volatile commodity prices and unfair competition from rich countries. Many of these people produce goods that fall outside the list of commodities with internationally agreed Fair Trade standards, and many others may lack access to strong producer organisations and public sector research to help them to comply with certification demands. For these people, access to high-value mass markets such as the UK can be vital for escaping from poverty.

4. Developing-country produce

In Africa alone, an estimated 1.5 million women and men depend on agricultural exports to the UK for a living.⁷⁴ Often these poor producers and workers (and their counterparts on other continents) are providing food to the UK and other developed countries following advice given to their governments by multilateral institutions, such as the World Bank and International Monetary Fund, which are dominated by rich countries.

This trade provides vital incomes for the millions of poor farmers and workers that depend on it, and can provide demonstrable benefits in both food security and poverty reduction. Having created the demand in the first place, rich nations such as the UK have an obligation not to boycott this food. Nonetheless, concern is increasingly being raised about the environmental implications of sourcing food from distant countries. While these are legitimate concerns, the effects of importing food from developing countries are not as substantial as often assumed. There are two principal reasons for this. First, the UK actually imports relatively little food from developing countries. Second, the distance food travels ('food miles') provides a poor measure of its total environmental impact.

Where does our food come from?

Nearly 80 per cent of food consumed in the UK comes from the UK or other EU countries (Figure 5). In 2007, the UK was 61 per cent self-sufficient in all foods and 74 per cent self-sufficient in indigenous food; the EU as a whole is over 90 per cent self-sufficient.⁷⁵ Although the UK's self sufficiency has declined since its peak in the 1980s (Figure 6), that peak was due to the artificial and damaging stimulus of the European CAP's subsidies and trade barriers.⁷⁶ Today, self-sufficiency remains above interwar levels, and as Defra notes, 'None of the main reasons behind the overall decline in self-sufficiency since 1995 can be considered as having a negative impact on food security in the United Kingdom'.⁷⁷

Figure 5: Origins of food consumed in the UK (by unprocessed value, 2006)⁷⁸

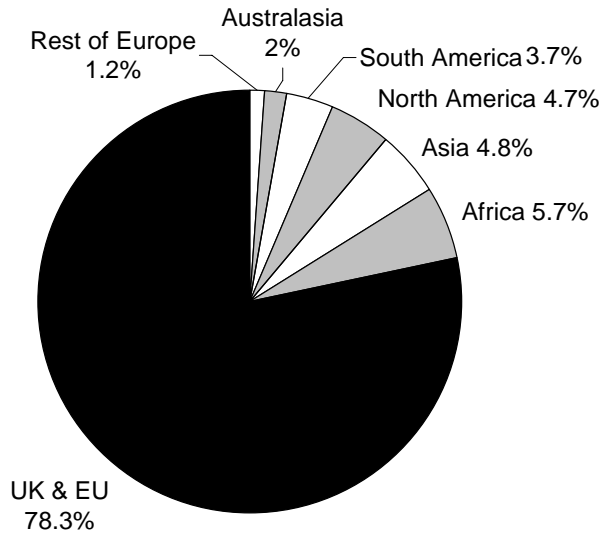
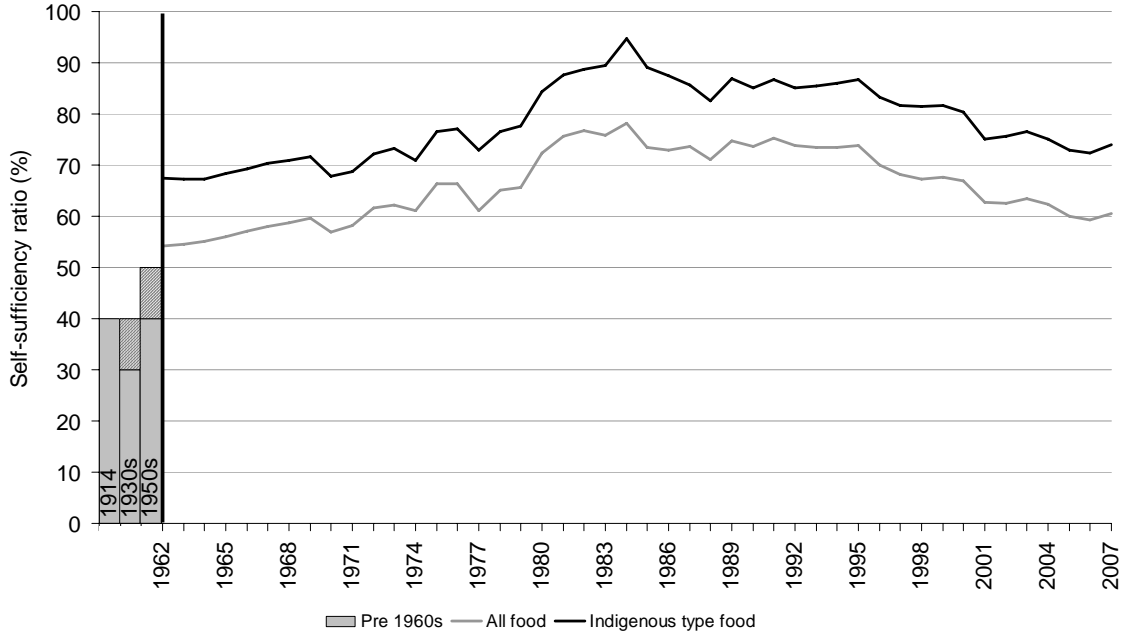


Figure 6: UK food self-sufficiency⁷⁹



Self-sufficiency though, is not a complete or appropriate measure of food security, which is when ‘all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet

their dietary needs and food preferences for an active and healthy life.’⁸⁰ This is more complex than self-sufficiency, and depends in part on sourcing food from a diverse range of stable countries.⁸¹ If the UK were entirely self-sufficient, this would arguably *decrease* food security by exacerbating the vulnerability of the nation’s food supply to bad weather, disease, and crop failures. And agricultural inputs such as fertilisers, machinery, and energy supplies would continue to be imported.⁸²

Food security and poverty reduction

The same is true for developing countries: self-sufficiency does not guarantee their food security. At the height of the recent food price crisis, some Asian countries resorted to banning rice exports in an effort to ensure their own food security. While understandable in the short-term, these measures had limited effects on domestic prices, and contributed to the drying up of supplies on global markets, driving up international prices further.⁸³

Similarly, the argument that agricultural exports are inherently bad for the poor, and that cash-crop production leads to the cultivation of less food or lower levels of nutrition, does not stand up to scrutiny. While these outcomes are possible, (for example if small farmers are displaced to make way for large commercial farms), there is convincing evidence that export agriculture has a beneficial impact on poverty reduction and food security.⁸⁴ In places with the potential for higher value crops and access to expanding markets, smallholders producing fruit and vegetables for export are often better off than those pursuing other rural livelihood options.⁸⁵ For instance, research in Kenya and Guatemala has found that smallholder households engaged in export horticulture had lower rates of food poverty, higher incomes, and better access to credit and extension services.⁸⁶ Families are able to purchase basic goods, send money to family members, and invest in their futures, which they would not otherwise be able to afford (see Box 4).⁸⁷

Box 4: Vegetable exports, Kenya⁸⁸

Mutulu and his wife are farmers selling vegetables grown in eastern Kenya's Makueni district to UK supermarkets including Tesco and Sainsbury's. The district is one of the poorest in the country and categorised as a marginal agricultural zone: not enough rainfall for rain-fed agriculture to flourish, but often sufficient for farmers to survive through subsistence farming. Around 71 per cent of the population does not have enough food during the dry season. The district does however, have significant potential for horticulture.

Mutulu says: 'I and my wife come from a family of farmers and we never went to school beyond primary school because we could not afford the school fees.'

'Before, I cycled 10 km each day to sell my produce to middle men and they gave me low prices and sometimes did not even buy my produce.'

Now Mutulu educates his children and is saving money thanks to a business partnership that has helped more than 400 farmers gain access to markets and on average doubled their incomes in six months. Their baby corn, aubergines, chillies, and okra are sold in the UK, with Tesco and Sainsbury's stocking their produce.

'Now I have a consistent market outlet for my baby corn and the prices are agreed in advance. This has given me more income and has enabled me to send my daughter to high school and my son to college. I have also been able to open a savings bank account and help my wife to start a small side business. My life has certainly changed.'

It does not follow from this that all agricultural export production is good for poverty reduction. Large-scale, capital-intensive farming systems (such as Brazilian soy exports for European livestock feed), generate large volumes of output, but few jobs.⁸⁹ Workers on large farms and plantations (including those in the UK) have mixed experiences. Marginalised workers such as migrants, informal and seasonal workers (most of whom are women), or those in low-skilled jobs are liable to earn unstable and low incomes, since supermarkets and food industry buyers capture the lion's share of the gains and pass the risks and costs on to farmers, many of whom are also forced to pass these on as precarious employment for those who pick and pack their produce.⁹⁰ Women are typically forced to accept the worst jobs, such as those at a daily piece rate, and seasonal jobs in harvesting, packing and processing. But in many cases these wages are crucial to their households' survival.⁹¹ The preferable alternative would be the improvement of conditions and protection of workers' rights, not the elimination of these jobs. Multi-stakeholder initiatives such as the Ethical Trading Initiative (ETI) can help to improve monitoring of how companies' practices improve, or undermine, conditions for workers along the supply chain. Companies that maintain stable contracts, fair prices, and reasonable lead times for

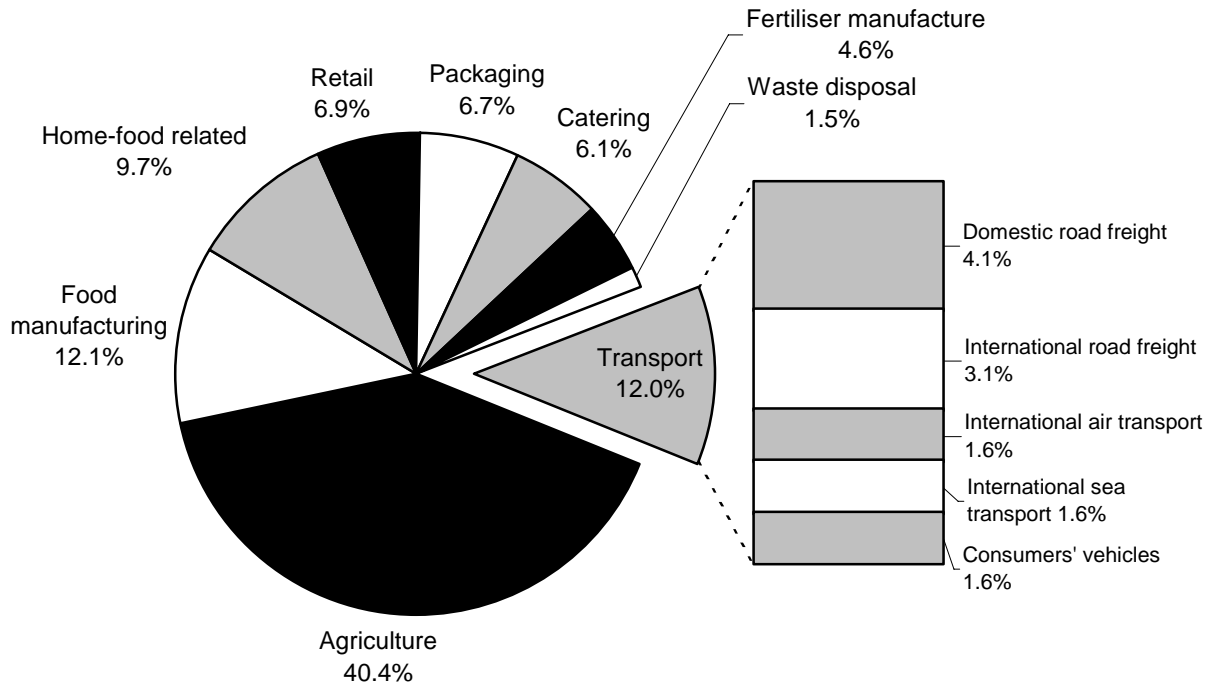
production help to generate stable jobs and living wages for producers and workers.

Large-scale operations may also have more negative environmental consequences, such as excessive use of pesticides and water resources. In addition, the link between trade and poverty reduction can be weakened by: highly concentrated systems of land ownership; limited access for poor people to marketing infrastructure; gender inequalities; and buyers offloading price pressures and demand fluctuations onto farmers. The appropriate response though is to overcome these barriers through more effective policies, and for purchasing power to be used responsibly by consumers and businesses. It is not to boycott developing-country exports.⁹²

Emissions

One concern increasingly raised with importing food from developing countries relates to the GHG emissions generated by transporting food over large distances. But the concept of 'food miles', i.e. the distance food travels from where it is grown or raised to where it is ultimately consumed, is a poor proxy for measuring the true extent of the GHGs emitted throughout the entire lifecycle of producing, processing, storing, and transporting food 'from farm to fork'. By focusing just on the transportation stage, food miles only capture 12 per cent (on average) of food's total GHG emissions (Figure 7), and even then fail to take account of the varying emissions intensities of different forms of transport. For example, per 'tonne km' (i.e. transporting one tonne a distance of 1 km) a large ship produces 94 times less emissions than does long-haul airfreight, 40 times less than a light goods vehicle, and 19 times less than a heavy goods vehicle on the UK's roads.⁹³

Figure 7: GHG emissions from UK food consumption⁹⁴



Airfreight is often singled out for particular attention. Only 1.5 per cent of imported fresh fruit and vegetables are air-freighted (40 per cent of which are from sub-Saharan Africa), although their transportation does produce 50 per cent of all emissions resulting from moving fruit and vegetables.⁹⁵ Airfreight is also the fastest growing means of food transport.⁹⁶ But while the environmental impacts of aviation are important for air-freighted goods, they represent a very small proportion of all food consumed;⁹⁷ the vast majority of food imported into the UK comes by sea.

Labelling produce as 'air-freighted' (as have some supermarkets) singles out less than 2 per cent of food-related emissions (or 0.4 per cent of the UK's emissions from all sectors)⁹⁸ without consideration of the other 98 per cent, or of the benefits that air-freighting may offer to some producers. Improvements in storage technologies and supply chain management mean increasing numbers of products can be switched away from airfreight to other forms of transport. Nonetheless, when roads are poor or when corruption at border posts

is severe (adding prohibitive costs to overland transportation), airfreight offers the only viable means for poor producers to secure access to international markets. In these limited situations, the tangible benefits to producers' lives are likely to significantly outweigh the slight environmental consequences.

Because emissions are generated throughout food's lifecycle, not just by transporting it, switching food sources to reduce 'food miles' does not guarantee a reduction in the volume of emissions. In many cases substituting tropical production with local growing of similar products, especially under artificial glasshouse conditions, will actually result in greater levels of GHG emissions, so-called 'carbon hypocrisy'.⁹⁹ This is due to the energy requirements necessary for maintaining constant artificial conditions. For example, a study published in 2005 showed that growing tomatoes in Spain and importing them to the UK during the winter produces nearly four times less carbon dioxide than growing the tomatoes in heated UK greenhouses.¹⁰⁰ A review of similar studies concluded that food miles are a poor indicator of both environmental and ethical impacts of food production. Because these differ significantly from product to product and from place to place, the full impacts of local or more distant food can only be assessed through context-specific social and environmental lifecycle assessments. Unfortunately this type of analysis is currently lacking for nearly all food chains.¹⁰¹

We all need to be concerned about the environmental impacts of the food we buy, but these concerns do not provide a rationale for boycotting produce from developing countries.

The distance between farm and fork tells us very little about food's total environmental impact, and says nothing of the social and economic benefits it delivers to those people who provide us with our food. Although labour conditions and contracts are not always as stable or as equitable as they should be, these will not be improved through boycotting food from poor countries. Instead consumers should support produce from developing nations and pressurise retailers to ensure that the rights of workers in their supply chains are protected and that fair prices, reasonable lead times, and stable contracts are all guaranteed.

Conclusion and recommendations

Achieving a more sustainable food system in the UK is of critical and urgent importance for people around the world living in poverty. Agricultural growth in developing countries enables people to work their way out of poverty and provides a critical first step for national economic takeoff. Many millions are dependent on our food purchases for this to happen; not only will boycotting food from developing countries be a disaster for poor people, but the environmental benefits of doing so are equivocal.

But, equally, we cannot afford to lose sight of the fact that the food we depend on for our sustenance is a major contributor to climate change. Many more poor women and men, already battling with the daily grind of poverty, stand to lose the most from the changes to the world's climate that unsustainable food consumption will increasingly drive.

Consumers

Fostering a culture of socially and environmentally sustainable consumption hinges on the actions of consumers themselves. For retailers and brands in the UK, the consumer is king. Progress towards a fairer and more sustainable system can be advanced by individual shoppers using this powerful position for good, and by those responsible for public and business procurement focusing attention and action on the four areas highlighted in this paper.

In the current economic climate, ethical concerns will be competing harder than ever with frugality for shoppers' attention. But the two need not be mutually exclusive. Wasting less food and reducing meat and dairy consumption inherently saves money. Developing-country and Fairtrade produce is not necessarily more expensive than the alternatives, but prices paid in-store do need to allow farmers and workers to receive a living wage without buyers offloading price pressures onto their suppliers. Consumers should:

1 Waste less food

- When using food: 'Waste not, want not' – be resourceful with leftovers and make sure food is used before its use-by date.
- When buying food: 'Want not, waste not' – don't overbuy food that will not get used before its use-by date.
- Be willing to purchase misshapen and oddly sized fruit and vegetables.

- Not expect products to be constantly available, as this necessitates over-ordering on the part of retailers and overproduction on the part of suppliers.

2 Reduce consumption of meat and dairy products

- Cut back on the amount of *all* meat and dairy produce consumed, and wherever practical, support small-scale farmers in the UK when buying reduced quantities of meat and dairy.

3 Buy Fairtrade produce

- Choose Fairtrade items over non-Fairtrade wherever possible to send a loud signal to retailers that consumers care and are willing to pay for decent labour standards.
- Ask shops to stock Fairtrade products where they aren't already doing so.
- Campaign for more work places, schools, and towns to work towards Fairtrade status.

4 Buy other foods from developing countries

- Continue to purchase, and not boycott, produce from developing countries.
- Consumers who support 'local' food should embrace a broad understanding of community and solidarity by welcoming globally sourced products that benefit producers and workers in developing countries.
- Demand that retailers and brand owners adopt a clear commitment to implement international labour standards in all their supply chains, and to ensure adequate monitoring and independent verification of these standards.
- Demand that companies are transparent about where their products come from, about how they are sourced, and about how their policies and practices impact on employment terms and working conditions in their supply chains.

Industry and government

Industry and government must both help to make consumers' ethical choices easier, and set the framework in which sustainable consumption can bring about real and lasting change. Many of these measures necessarily go beyond the scope of this paper, but they include actions within the four areas highlighted in the paper:

1 On waste

- Businesses should ensure greater transparency and clear terms of contract throughout food supply chains to reduce overproduction, waste, and resource inefficiency.
- Retailers should move away from overordering of food to guarantee constantly available supplies, resulting in overproduction.
- Grocery organisations should continue to reduce the volumes of waste packaging created in supply chains through improving packaging innovations and supply chain efficiencies.

2 On meat and dairy

- Government should develop targets for emissions reductions from livestock and establish a roadmap for emissions reductions in line with the overall reductions set out in the Climate Change Act 2008. These should outline the reductions necessary from consumption and from livestock management, and should contain measures to ensure that affected small-scale farmers receive a living wage.
- An emissions labelling scheme should be extended to meat and dairy products. This must be standardised across industry and reflect rigorous and standardised quantification of the emissions generated throughout a product's lifecycle. It should also take account of significant second-order emissions generated by land-use change for livestock rearing or feeding.

3 On Fair Trade

- Retailers should support Fair Trade and ensure that consumer demand for Fairtrade produce is met.
- Retailers should 'choice edit' on behalf of consumers and switch own-brand products to Fairtrade wherever feasible.

4 On produce from developing countries

- Businesses should continue sourcing produce from developing countries where there are benefits to the farmers and workers involved in production and processing.
- Retailers and brand owners should build stable long-term relationships with producers, so they have the incentive to invest in improving labour standards. If meeting these standards requires higher prices, businesses should continue to source from that producer.

- Businesses should ensure especially that women workers' interests are protected.
- Businesses should develop innovative initiatives to increase consumers' knowledge of food's origins to reduce the emotional distance between consumers and producers.
- Responsible purchasing behaviour by consumers and procurement staff should be promoted by giving access to accurate information on supply chain standards.
- Context-specific social lifecycle assessments should be developed to provide procurement staff with benchmarks when sourcing foods.
- Rigorous and standardised quantification of embodied GHG emissions in products and services, such as Publicly Available Specification (PAS) 2050, should be further developed and used to assist responsible purchasing decisions.
- Any labelling based on such assessments must be limited purely to emissions quantification and should not seek to reflect multiple social and environmental concerns. Nor must such labelling substitute for genuine 'choice editing' by businesses on behalf of consumers.
- Businesses should make use of the growing number of tools being developed to risk-assess labour and environmental standards, such as the initiatives being developed by the Ethical Trading Initiative, SEDEX and the Chartered Institute of Purchasing and Supply Responsible Procurement Group.

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