



House of Commons
International Development
Committee

Global Food Security

First Report of Session 2013–14

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First Report of Session 2013–14

Volume I: Report, together with formal minutes, oral and written evidence

Additional written evidence is contained in Volume II, available on the Committee website at www.parliament.uk/lindcom

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The International Development Committee

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The Reports of the Committee, the formal minutes relating to that report, oral evidence taken and some or all written evidence are available in a printed volume.

Additional written evidence may be published on the internet only.

Committee staff

The current staff of the Committee are Dr David Harrison (Clerk), Chloe Challender (Senior Committee Specialist), Judy Goodall (Inquiry Manager), Louise Whitley (Inquiry Manager), Rob Page (Committee Specialist), Anita Fuki (Senior Committee Assistant), Annabel Goddard (Committee Assistant), Paul Hampson (Committee Support Assistant) and Hannah Pearce (Media Officer).

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Summary

In 2012, the G8 launched a New Alliance for Food Security and Nutrition, an alliance of G8 countries, developing country governments and private companies. The G8 will return to the subject during the UK's Presidency in 2013. As well as hosting the G8 summit on 17-18 June, on 8 June the UK will host an event called 'Nutrition for Growth: Beating hunger through nutrition and science'.

The emphasis on nutrition is most timely. There have been two notable 'shocks' or 'spikes' in global food prices in recent years, peaking in June 2008 and February 2011. The 2008 price spike led to stagnation in the fight against hunger: while the proportion of the global population suffering from hunger had been declining before the price spike, the rate of progress declined when the spike occurred.

The price spikes reflect a number of changes, including fundamental changes in supply and demand. Demand is increasing. UK law requires 5% of total road transport fuel to be derived from biofuels. In addition, EU targets will require 10% of transport energy to be drawn from renewable sources by 2020, causing dramatic food price increases. We recommend that the Government revise the 5% target to exclude agriculturally-produced biofuels, and that it push for reform of the EU target.

Globally, demand for meat is increasing, leading to a growth in the production of grain-fed livestock, with crops used to feed livestock instead of humans. We recommend a focus on sustainable systems such as pasture-fed cattle rather than on grain-fed livestock. Additionally, as much of 30% of food produced globally is wasted. In developed countries such as the UK, a large amount of food is wasted by consumers and by the food industry. We recommend that the Government set targets for food waste reduction for producers and retailers and introduce sanctions for failure to meet the targets.

Rising world population, expected to increase from 7.1 billion today to 9.3 billion by 2050, will also add to demand. There is a great unmet need for contraception. DFID has made significant efforts to address this need, and must maintain this focus on women's reproductive rights.

Supply must be increased. Donor funding for agriculture has shown a slight increase in recent years, but the historical trend is one of decline: donor funding for agriculture fell by 72% between 1988 and 2003. Smallholders have a key role to play in food security. DFID should devote a greater proportion of its budget on supporting agricultural extension services. A small but potentially increasing number of smallholders are able to sell their produce on to large corporations. To support this, farmer organisations such as co-operatives are vital. We recommend that DFID support the formation of farmer organisations. Additionally, DFID should increase its funding for organisations such as the Africa Enterprise Challenge Fund (AECF) which help smallholders to engage with

large corporations.

In many developing countries, large corporations are buying up areas of land previously farmed by smallholders. Some allege that this is sometimes done without the informed consent of the smallholders. Implementation of the UN Voluntary Guidelines on the Governance of Tenure would help, as would work to establish land registers. We recommend that DFID launch additional projects on land registration.

Both smallholders and large commercial producers need an enabling environment. Investment in roads, storage and irrigation infrastructure is vital. Additionally, climate change is making it more difficult for farmers to decide when to sow, cultivate and harvest their crops. We welcome the Government's pledge to provide £2.9 billion of funding to tackle climate change over the next two years; building the resilience of the poor to climate-related shocks will also be crucial.

There have been various suggestions as to how food price volatility might be mitigated, but the wisdom of some of these suggestions is dubious. Export controls have served to exacerbate the situation. However, there may be a case for judicious use of stocks to reduce food price volatility. We recommend that the Government conduct further research into this. We recognise that misinformation about the level of stocks in China may have contributed to the 2008 price spike, but the Agricultural Market Information System (AMIS), formed in 2011, now requires participant countries to provide monthly data on stocks. This is a major step forward in the fight against food price volatility.

Social protection, including cash transfers and other social insurance and social welfare schemes, plays a vital role in protecting the food security of the poorest when shocks occur. In 14 of the 29 countries in which it has bilateral programmes DFID does not currently plan to fund social protection; we ask it to explain the thinking behind this. Where emergency interventions are needed to protect food security, cash- and voucher-based schemes are usually preferable to in-kind food aid. The World Food Programme's (WFP's) 'Purchase for Progress' scheme, under which food aid is procured from suppliers in developing countries, supports WFP's humanitarian work while also supporting local economies. We were pleased that the Parliamentary Under-Secretary of State agreed to consider scaling up DFID's support, and we reiterate our belief that this would be a wise thing for DFID to do.

Undernutrition has long-term health implications and represents a barrier to development more broadly. Although DFID works bilaterally in 29 countries, it only has bilateral nutrition programmes in 16 countries. We recommend that DFID launch additional bilateral nutrition programmes, with a particular focus on nutrition during pregnancy and early years.

Our report shows that real progress is achievable. With some of the measures we propose, the impacts will by nature be gradual, becoming apparent only in the medium- to long-term. For other measures, however, the impacts will be immediate, the reform of

biofuels targets being the most obvious example. All that is needed is political will.

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1 Introduction

1. In 2012, the G8 launched a New Alliance for Food Security and Nutrition, an alliance of G8 countries, developing country governments and private companies. Over 60 companies are involved, half of which are African; total commitments from business are over \$4 billion. The New Alliance aims to invest in countries which use reforms to promote investment and agricultural activity.¹

2. The G8 will return to the subject during the UK's Presidency in 2013. As well as hosting the G8 summit on 17-18 June,² on 8 June the UK will host an event called "Nutrition for Growth: Beating hunger through nutrition and science".³ Concurrently a large-scale campaign ("Enough Food for Everyone IF") is being run by over 200 UK- and Ireland-based NGOs.⁴ In a specially-recorded message to coincide with the launch of the campaign, the Prime Minister stated that:

Nearly a billion people around the world do not get enough food. And undernutrition holds back the growth and development of millions of children.

This is simply not acceptable in 2013.

That's why I welcome the NGO campaign on food. I know that this is an issue which people up and down the country feel strongly about and will be campaigning on this year. I'm determined that this Coalition Government will listen to their passion and lead the world.⁵

3. According to the website of the UN Food and Agriculture Organization (FAO), "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life."⁶ Food insecurity (the lack of such conditions) is one of the defining issues of our times. Across the world almost 870 million people suffer from hunger.⁷ The Millennium Development Goals (MDGs) included a target to reduce the number of people suffering from hunger by half between 1990 and 2015,⁸ and we anticipate that hunger will also feature in the post-2015 development goals when the MDGs expire. While progress against the MDG target on hunger has been better than some feared, this progress has been achieved largely in East Asia and Latin America: progress is lagging in South Asia, Western Asia and sub-Saharan Africa.⁹

1 Ev w111

2 "UK Presidency of G8 2013", *Inside Government*, www.gov.uk

3 Ev 107

4 "Who we are", *Enough Food for Everyone IF*, enoughfoodif.org

5 "David Cameron's message to anti-hunger IF campaign", *Inside Government*, 23 January 2013, www.gov.uk

6 "Food security statistics", *Food and Agriculture Organization of the United Nations*, www.fao.org

7 UN FAO, *The State of Food Insecurity in the World*, 2012, p 8

8 Official list of MDG indicators, effective 15 January 2008, www.un.org

9 Ev 59

4. For important crops such as rice, wheat, maize and soybeans, yield growth rates have slowed globally. The decline in yield growth rates has been observed in both developed and developing countries.¹⁰ Overfishing also poses a serious problem: fish stocks are under strain from fishing which is either poorly regulated, unregulated or simply illegal. It has been suggested that all species of seafood which are currently fished will be extinct by 2048.¹¹

5. At the African Union summit in July 2003, African leaders signed the Maputo Declaration, committing their governments to spending 10% of national budgets on agriculture, and achieving 6% annual growth rates in agriculture by 2008.¹² Yet in a study of African countries conducted by ONE, an NGO, nine of the 19 countries studied were found to have reduced their agriculture budgets since the signing of the Maputo Declaration. Only four of the 19 countries had met the 10% target, with another two close behind.¹³ Donor funding for agriculture has shown a slight increase in recent years, but the historical trend is one of decline.¹⁴ In its written evidence, ONE reports that donor funding for agriculture fell by 72% between 1988 and 2003.¹⁵ Throughout this period NGOs played an invaluable role in providing much-needed support to smallholder farmers.¹⁶

6. Box 1 illustrates the various ways in which DFID works on food security through its bilateral programmes.

Box 1

DFID's bilateral work on food security

There are three main strands to DFID's bilateral work on food security:

- Supporting the provision of public goods (e.g. infrastructure; research) and an 'enabling environment' for the agricultural sector, including work on land tenure reform;
- Supporting smallholders who may not otherwise be commercially viable, through work on resilience, diversification and social protection;
- Supporting the integration of smallholders into markets and value chains, e.g. by helping smallholder co-operatives to access credit and agricultural inputs.

Source: adapted from Ev 102

10 UN FAO, *Investing in Agriculture for a Better Future: The State of Food and Agriculture 2012*, p 105

11 Bernice Lee et al, *Resources Futures* (Chatham House, 2012), p 29

12 Ev w111

13 Ev w112

14 Ev 65

15 Ev w111

16 "Supporting smallholders in securing global food security", *Tearfund*, 10 August 2012, www.tearfund.org

7. There are a number of major international institutions and initiatives working on food security. Box 2 provides details of these.

Box 2

Key institutions and initiatives

UN World Food Programme (WFP): WFP focuses on humanitarian assistance, with two-thirds of its budget used for humanitarian purposes. In 2012, the UK was the fourth-largest contributor to WFP, providing over £126 million. Most of the UK's contribution to WFP (84%) was for specific projects. The UK has recently begun providing some of its funding on a multi-year basis. The UK sometimes provides in-kind contributions to WFP, and DFID also provides a 'core' contribution, having agreed to provide £100 million over a four-year period.

UN Food and Agriculture Organization (FAO): FAO offers policy advice, both at country level and global level, and co-ordinates the negotiation of relevant international standards and treaties. It leads the UN's humanitarian agriculture cluster, and will co-lead the food security cluster. The UK provides 'core' funding to FAO, making it FAO's fifth-largest contributor. The UK also provides project-specific funding which is used for policy work, work on livelihoods (including livestock), emergency and rehabilitation work, and longer-term development work.

UN International Fund for Agricultural Development (IFAD): IFAD provides loans and grants to approximately 119 national governments, for work in rural areas. These loans and grants are used to fund work in rural areas, including projects on capacity building; female empowerment; yield improvement; smallholder adaptation to climate change; and natural resource management. The UK was the largest contributor to the most recent replenishment of IFAD. DFID has also made a specific contribution to IFAD's Adaptation for Smallholder Agriculture Programme (ASAP), to which it is the largest contributor.

Zero Hunger Challenge: This was launched by UN Secretary-General Ban Ki-Moon at the UN Conference on Sustainable Development (Rio+20) in June 2012. It aims to ensure sufficient food for all throughout the year.

UN Committee on World Food Security (CFS): The CFS seeks to facilitate co-operation between governments, international organisations, the private sector and civil society organisations (CSOs). Its functions are as follows:

- Co-ordination – initially at global level, but subsequently also at regional and national levels;
- Policy convergence;
- Support and advice to national governments and regional organisations;
- Development of monitoring, so as to facilitate accountability and sharing of best practice.

Source: adapted from Qq 69, 105; Ev 61, 84, 90, 100-101; Ev w46; DFID, Multilateral Aid Review, March 2011, pp 173, 183, 205.

Our inquiry

8. As a Committee, we recognise that the issue of food security is fundamental to international development. We produced a report on this area during the last Parliament, looking specifically at the work of the World Food Programme (WFP).¹⁷ Given the increasing focus on food security during the UK's G8 Presidency, we feel that this is an opportune time to return to the issue. In this inquiry we consider what steps DFID could take to improve global food security, while also considering broader issues affecting the global food system. Some of the issues we cover also feature in recent reports by other Committees, including the Environmental Audit Committee's report on "Sustainable

¹⁷ International Development Committee, Sixth Report of Session 2006-07, Sanitation and Water, HC 493-I

Food”¹⁸ and the Energy and Climate Change Committee’s report on “The road to UNFCC COP 18 and beyond”.¹⁹

9. Our report begins (Chapter 2) with a detailed examination of the long-term factors affecting demand for and supply of food. In Chapter 3, we consider how these factors, together with more short-term policy decisions such as export bans, have contributed to recent food price “shocks” or “spikes”, and how to reduce the magnitude of these shocks. Finally, in Chapter 4, we consider how best to protect the most vulnerable when shocks occur.

10. We received 40 pieces of written evidence from a wide range of individuals and organisations including academics, corporations and NGOs. We also held three oral evidence sessions. Witnesses at the oral sessions included Lynne Featherstone MP, the Parliamentary Under-Secretary of State for International Development; Norman Baker MP, the Parliamentary Under-Secretary of State for Transport; and representatives of WFP, FAO, the International Fund for Agricultural Development (IFAD), the Global Alliance for Improved Nutrition (GAIN), the International Food Policy Research Institute (IFPRI) and the Government Office for Science. In support of this inquiry we visited Ethiopia, a country which has endured well-documented challenges related to food security in the past, but which has made considerable progress in recent years. We spent time in Amhara and Benishangul-Gumuz states as well as in Addis Ababa. Finally, we are grateful to Rob Bailey of Chatham House for serving as our Specialist Adviser in this inquiry.

2 Long-term trends

Overview of demand and supply issues

11. There are a number of structural factors which affect both demand for and supply of food, and which will continue to do so over the long-term. On the demand side, key issues include biofuel policy; food waste; increasing meat consumption; and an increasing population. On the supply side, key issues include the role of smallholders, the role of commercial farming, and the damaging net effects of climate change on agricultural productivity. This chapter explores these factors in detail.

Demand

Biofuels

12. Biofuels are liquid fuels produced from biomass, used as substitutes for diesel- or petrol-based transport fuel. The two principal types of biofuels are ethanol and biodiesel. Ethanol is produced by the fermentation of sugar crops (e.g. sugar cane, sugar beet) or carbohydrate crops (e.g. corn, wheat), and can be mixed with petrol. Biodiesel is produced

18 Environmental Audit Committee, Eleventh Report of Session 2010-12, Sustainable Food, HC 879

19 Energy and Climate Change Committee, Second Report of Session 2012-13, The road to UNFCC COP 18 and beyond, HC 88

from fats (including rapeseed, palm oil and soybean oil) by a process of esterification.²⁰ Biofuels can also be produced from non-food products: this is covered below.

13. The UK's Renewable Transport Fuel Obligation (RTFO) sets a target for the percentage of biofuel in total road transport fuel, which applies to all suppliers supplying at least 450 000 litres of fuel per year.²¹ This target has been increasing annually, and reached 5% in April 2013.²² Furthermore, from 2020 EU targets will require 10% of transport energy to be drawn from renewable sources.²³ By 2020, biofuel usage in the EU is expected to be almost equivalent to 30 million tonnes of oil.²⁴

14. Many argue that the use of crops to produce fuel instead of food is undermining food security.²⁵ The EU target is expected to cause prices of oilseed, vegetable oil, maize and wheat to rise by 20%, 36%, 22% and 13% respectively by 2020.²⁶ Biofuels also create a link between food prices and energy prices, thus leading to increasing food price volatility.²⁷ If current patterns of biofuel usage continue, estimates indicate that the number of people at risk of hunger will increase by anything between 25 million and 135 million in Africa alone.²⁸ Moreover, biofuel production is in fact likely to increase, since increasing energy prices may make biofuels more economically more viable.²⁹ Some predict that biofuel production will increase by 50% during the remainder of this decade.³⁰ In his evidence the Parliamentary Under-Secretary of State for Transport argued that some biofuels are in fact no better for the environment than fossil fuels, due to the land use changes which occur as a result of biofuel production³¹ (e.g. deforestation)³². ActionAid argues that biofuels may be responsible for extra net greenhouse gas emissions of up to 56 million tonnes per year.³³

15. There is general agreement that UK and EU policies on biofuels should be revised. While the EU target will require 10 % of transport energy to be drawn from renewable sources by 2020, the European Commission (EC) has recently proposed that no more than 5% should come from food-based biofuels,³⁴ but the UK Government is unenthusiastic about this proposal. In his evidence to this Committee the Parliamentary Under-Secretary of State for Transport stated that:

20 Rob Bailey, *The Trouble with Biofuels: Costs and Consequences of Expanding Biofuel Use in the United Kingdom* (Chatham House, 2013), p 3

21 "Renewable Transport Fuels Obligation", *Inside Government*, 5 November 2012, www.gov.uk

22 "Renewable Transport Fuels Obligation", *Inside Government*, 5 November 2012, www.gov.uk

23 ActionAid, *Biofuelling the global food crisis: why the EU must act at the G20*, January 2012, p 6

24 ActionAid, *Biofuelling the global food crisis: why the EU must act at the G20*, January 2012, p 6

25 Ev 64, 75; Ev w2

26 Ev w2

27 Ev w49

28 Ev w16

29 Ev 60

30 Ev 60

31 Q 125

32 Timothy Searchinger et al., "Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land-Use Change", *Science*, vol 319 (2008), pp 1238-1240

33 Ev w115

34 Ev 64

we prefer something that is better and greener... the introduction of ILUC [Indirect Land Use Change] factors, which take into account indirect land use change and its consequences, particularly in relation to greenhouse gas emissions, but also indirectly the use of land for food production... if we ended up with a cap, we would want a lower cap rather than a higher cap.³⁵

The Parliamentary Under-Secretary of State for Transport argued that while ILUC factors do not formally include food security, the effect of their introduction would be to reduce the impact of biofuels on food security.³⁶ Many advocate a more radical revision of biofuels policies. The Secretary of State for Energy and Climate Change, Rt Hon Ed Davey MP, has been quoted as saying: “We’ve made a real mistake in the EU [on biofuels] and we’ve got to end that mistake, the sooner the better.”³⁷ In 2011, ten agencies including WFP and FAO published a joint report advocating the abolition of biofuels mandates.³⁸ In his evidence Andrew Dorward, Professor of Development Economics at the School of Oriental and African Studies (SOAS), said:

Is there anything that so many international organisations have agreed on? We had the FAO, the OECD and the World Bank... It is almost unique for them all to agree on something quite so strongly. That shows the strength of the consensus.³⁹

16. Biofuels are driving higher and more volatile food prices and are having a major detrimental impact on food security. In some cases biofuels may be even more damaging to the environment than fossil fuels. We recommend that the Renewable Transport Fuel Obligation (RTFO), which commits the UK to consuming biofuel equivalent to 5% of transport fuel volumes, be revised to exclude agriculturally-produced biofuels. We recognise that the revision of the RTFO would make it more difficult for the UK to meet its EU target of deriving 10% of transport energy from renewable sources. However, the EU target does not apply until 2020. Consequently there is nothing to stop the UK from revising the RTFO now.

17. In addition to revising RTFO, the UK must continue to push its European partners to revise the target under the Renewable Energy Directive (RED) which requires EU countries to derive 10% of their transport energy from renewable sources by 2020. This reform could include introducing Indirect Land Use Change (ILUC) factors into the RED, and imposing a cap on the level of food-based biofuel which can count towards the RED target. The introduction of ILUC factors and the imposition of a cap are not mutually exclusive options: both can be pursued concurrently. We recommend that the

35 Q 129

36 Q 127

37 “Ministers hostile to biofuel limit”, European Voice, 21 March 2013, www.europeanvoice.com

38 UN FAO et al, Price Volatility in Food and Agricultural Markets: Policy Responses, June 2011, p 27

39 Q 53

UK Government push for both, and that it push for the cap to be set at as low a level as possible.

18. During the coming weeks the Government will have several opportunities to raise the issue of biofuels on the international stage. The first is the meeting of the EU Energy Council on 6 June, while the second is the ‘Nutrition for Growth’ event on 8 June,⁴⁰ in her evidence to this Committee the Parliamentary Under-Secretary of State for International Development told us she was ‘sure’ that the issue of biofuels would be raised at the Nutrition for Growth event.⁴¹ The third is the G8 summit itself. Lynne Featherstone told us that: ‘The Government is not engaging directly with G8 countries on the issues of biofuels.’⁴² This is disappointing. **We were pleased to receive the Parliamentary Under-Secretary of State for International Development’s assurance that biofuels would be discussed at the ‘Nutrition for Growth’ event. We also urge the Government to raise the issue at the G8 summit itself, and at the meeting of the EU Energy Council on 6 June. The Government should explain the outcome of these discussions to us in its response to this report.**

19. While the use of food crops to produce biofuels poses a serious threat to food security, biofuels can also be produced from other sources (for example algae, agricultural and human waste, switch grass); from the non-edible parts of food crops; or on land which is unsuitable for growing food crops.⁴³ In China, IFAD has supported the development of family-owned biodigesters which use waste products to produce electricity and gas for domestic use; similar projects are now underway in Tanzania, Ghana and Vietnam.⁴⁴

20. Oxfam points out that even non-food-based methods of biofuel production may still use up valuable resources which could otherwise be used for food production (e.g. water, soil and land),⁴⁵ while ActionAid argues for a focus on those forms of biofuels which do not require land (e.g. biofuels derived from waste products).⁴⁶ It is nevertheless clear that any non-food-based biofuel technologies are far less problematic than conventional biofuels. In his evidence to us the Parliamentary Under-Secretary of State for Transport expressed enthusiasm for algae-based biofuels,⁴⁷ and also underlined the potential of waste cooking oil as a source of biofuel, describing this as ‘entirely beneficial.’⁴⁸ He also stressed that the RTFO incentivises these techniques: biofuels of this type ‘count double’ towards the 5% target.⁴⁹ It was partly as a consequence of this, he argued, that the percentage of biofuels in the UK derived from waste products had increased from 15% to 84% over a period of four to five years.⁵⁰ **We welcome the Government’s support for non-food-based biofuels. We**

40 Ev 107; Ev w117

41 Q 148

42 Q 147

43 Qq 110, 113; Ev 61

44 Q 113

45 Ev 64

46 Ev w116

47 Q 128

48 Q 125

49 Qq 125, 128

50 Q 125

recommend that the Government give particular support to the use of biofuels such as those derived from waste products, whose production does not require land.

Food waste

21. A recent report from the Institution of Mechanical Engineers claimed that between 30 and 50% of food produced in the world (1.2–2 billion tonnes) was wasted.⁵¹ The notion that wastage might be as high as 50% has been questioned in some quarters,⁵² but more conservative reports still put wastage at up to 30%.⁵³ Valuable resources of land, energy, fertiliser and water are being consumed by the production of food which ends up as waste.⁵⁴ Some of this wastage occurs in developing countries as post-harvest losses, primarily due to a lack of technologies and inadequate infrastructure (see below), but in high-income countries (HICs) a greater degree of responsibility lies with the food services industry and the consumer.⁵⁵ Wastage at household level in the UK has declined in recent years, but still remains at the remarkably high rate of 20%.⁵⁶ In his evidence Tim Lang, Professor of Food Policy at City University, London, said:

What we have is a model of systematic waste here in the West, where the contracts and specifications of the big retailers and the big traders... actually structure waste. They will not accept, through quality controls, some foods in.⁵⁷

The 2011 Foresight report on *The Future of Food and Farming* made the following recommendations for reducing food waste:

- a) Use of cheap, mass-produced sensor technology to detect when foods have gone off, thus reducing reliance on arbitrary use-by dates;
- b) ‘Productive recycling’ of unwanted food: depending on whether the food is fit for human consumption, this could include FareShare and similar schemes, or using the food as animal feed;
- c) Consumer campaigns to reduce waste.⁵⁸

We recommend that the Government redouble its efforts to reduce the level of food waste in the UK. It should begin by taking on board the suggestions made in its own Foresight report on *The Future of Food and Farming*. For example, the Government should launch consumer campaigns to reduce waste and promote FareShare and similar schemes for unwanted food. The Government should also set targets for food waste reduction for producers and retailers and introduce sanctions for failure to meet the targets.

51 Institution of Mechanical Engineers, *Global Food: Waste not, want not*, January 2013, p 2

52 “UK supermarkets reject ‘wasted food’ report claims”, *BBC News Online*, 10 January 2013, www.bbc.co.uk

53 Ev 92

54 Institution of Mechanical Engineers, *Global Food: Waste not, want not*, January 2013, p 2

55 Q 45; Ev 92

56 Ev w42

57 Q 59

58 Foresight, *The Future of Food and Farming: Challenges and choices for global sustainability*, January 2011, p 19

Diet and livestock production

22. Globally, demand for meat is increasing.⁵⁹ This is largely due to increased demand in emerging economies: in 1985, average meat consumption per person per year in China was 20kg; this has now more than doubled to 50kg.⁶⁰ In the West, meanwhile, demand for meat remains high: consumption in the UK stood at 85.8kg per person in 2007.⁶¹ Globally, meat production is expected to double between now and 2050.⁶² The consequence of increasing demand for meat is the use of crops to feed livestock rather than humans: the expanding soy industry in Paraguay is one example.⁶³ The UK Food Group suggests that this causes a 'calorie loss' equivalent to the annual 'calorie need' of 3.5 billion people.⁶⁴ Increasing consumption of other animal products such as cheese poses the same problems.⁶⁵ Professor Stefan Dercon, Chief Economist at DFID, argued that:

We know in the context of rising food prices in recent years, that the livestock demand clearly is a factor in getting prices very high. It is quite important to realise that once we get the pricing of cereals, including the environmental impacts and so on, right in the markets, the price of livestock will also keep on increasing, so there is a likely push also from markets to make meat, over the longer run, substantially more expensive.⁶⁶

Professor Tim Wheeler, DFID's Deputy Chief Scientific Adviser, agreed.⁶⁷ Professor Tim Lang, however, argued that:

The case for reducing meat consumption in the West from our astronomic levels is overwhelming; it is a public health gain if you reduce it... there is a win-win for the environment and for public health if you reduce our meat consumption [...] we are worried about this assumption that 50% of grain or 40% of grain to the world must be diverted down the throats of animals to then give us meat. There are cases when that can be useful, depending on the climate. To factor in a meat engine, which is like a juggernaut driving our definition of what a good food system is, is crazy. It is a crazy use of resources, it is crazy economics and it is crazy public health.⁶⁸

Simply urging the Western world to stop consuming meat is neither feasible nor desirable. Moreover, nor is it necessary: meat production based on pasture-fed systems (e.g. pasture-fed cattle), as opposed to the mass production of grain-fed livestock, is markedly less problematic.⁶⁹ The Food Ethics Council therefore suggests a 'less but better' approach, with

59 Ev w43

60 Ev w101

61 "Meat consumption per person, kg, 2007", www.scribd.com

62 Ev w43

63 Ev w40

64 Ev 74

65 Q 62

66 Q 151

67 Q 160

68 Q 62

69 Q 62

meat promoted as a occasional product rather than an everyday staple.⁷⁰ **The rate of increase in global meat consumption is unsustainable: the consequence is a growth in the production of grain-fed livestock, with crops used to feed livestock instead of humans. Clearly this does not mean that the world should stop consuming meat: this would be disproportionate and unrealistic. However, in the longer-term it may be appropriate to focus on sustainable systems such as pasture-fed cattle rather than on grain-fed livestock, with meat promoted as a occasional product rather than an everyday staple.**

Population

23. The global population, which presently stands at 7.1 billion, is expected to reach 9.3 billion by 2050.⁷¹ The rate of population growth is expected to decline in many areas, but to increase in parts of sub-Saharan Africa:⁷² in future population growth is expected to be concentrated amongst the poorest and least food secure countries.⁷³ This will have implications both for chronic hunger and for vulnerability to shocks.

24. The rural-urban profile of the global population is also changing: by 2020, 86% of population growth is expected to occur in large urban centres in developing countries.⁷⁴ Urbanisation raises a number of issues for food security. On the one hand, it implies a reduction in the proportion of the population engaged in agricultural activities. Moreover, megacities pose a number of particular challenges related to, for example, transport of food, storage, contamination and nutrition.⁷⁵ Urbanisation also has particular implications with respect to shocks: we will deal with this in Chapter 4.

25. Alongside the huge predicted increase in world population is a massive unmet need for birth control. DFID has made significant efforts to address this need. In July 2012, the UK Government co-hosted the London Family Planning Summit with the Bill & Melinda Gates Foundation. The Government reports that the commitments made at the summit by international donors will provide access to contraceptives for 120 million* additional women and girls between 2012 and 2020.⁷⁶

26. The global population continues to increase, and food production is expected to have to increase by 60-70% by 2050. In future population growth is expected to be concentrated amongst the poorest and least food secure countries; this will have implications for both chronic hunger and vulnerability to shocks. While detailed discussion of population-related policies is beyond the remit of this report, we urge DFID to maintain the strong focus on women's reproductive rights shown in last year's Family Planning Summit and maintain this sector as a priority for expenditure.

70 Ev w42

71 Ev w16

72 Ev w89

73 Rob Bailey, *Growing a Better Future: Food justice in a resource-constrained world* (Oxfam, 2011), p 14

74 Ev w3

75 Ev w89

76 "Family planning: London summit, 11 July 2012" and "Family planning: Historic breakthrough for 120m women", *Inside Government*, 11 July 2012, www.gov.uk

Supply

Smallholders

27. The precise definition of a smallholder varies: according to the World Bank's Rural Development Strategy, only those farmers with less than two hectares of land count as smallholders.⁷⁷ Others are less specific:

the definition of smallholders differs between countries and between agro-ecological zones. In favourable areas with high population densities they often cultivate less than one ha of land, whereas they may cultivate 10 ha [hectares] or more in semi-arid areas, or manage 10 head of livestock.⁷⁸

28. Smallholders in Africa generally have much lower levels of productivity than those in other regions,⁷⁹ and many suffer from hunger and poverty.⁸⁰ Yet while smallholders are generally poor, in many areas they are the main producers of food.⁸¹ In his evidence Dr Shenggen Fan, Director of IFPRI, said:

There are probably three types of smallholders. One is subsistence smallholders who will not be able to be converted into commercial enterprises. [...] They either have to move to the cities or move to another agricultural area where they can really make a decent living.

The second type is subsistence farmers who have the potential to be converted into commercial enterprises. The third type is already commercialised smallholders.⁸²

29. Globally, female smallholders make up 43% of the total agricultural workforce. In sub-Saharan Africa, this figure rises to 50%. Yet female smallholders face many challenges: they often lack access to quality seeds and fertiliser, or to land. Access to credit is also a challenge for female smallholders: only 10% of the total credit granted to smallholders is granted to women. Farm Africa and Self Help Africa, in their written evidence, argue that if female smallholders were given the same opportunities as their male counterparts, their levels of productivity would increase by 30%.⁸³

Extension services

30. It is widely argued that agricultural extension services—effectively the provision of training and advice to smallholders— should be scaled up.⁸⁴ Extension services might cover

77 Ev w29

78 John Dixon, Aysen Tanyeri-Abur and Horst Wattenbach, *Smallholders, globalization and policy analysis* (UN FAO, 2004)

79 Ev w106

80 Rob Bailey, *Growing a Better Future: Food justice in a resource-constrained world* (Oxfam, 2011), p 53

81 Q 106

82 Q 106

83 Ev w37

84 Qq 28, 52; Ev w35

issues such as food safety, marketing,⁸⁵ balanced-input agriculture, sustainable land management, landscape approaches, integrated pest management, integrated plant nutrient management, watershed management and rangeland management.⁸⁶ The Fairtrade Foundation argues that low-tech solutions such as extension services are often overlooked in favour of more high-tech projects: estimates indicate that less than 2% of Nigerian farmers have access to extension services.⁸⁷ It also argues that extension services should be targeted especially at women.⁸⁸ **Agricultural extension services play a critical role in improving smallholders' food security. In order to be sustainable, extension services should be funded from locally-generated revenue flows. DFID should devote a greater proportion of its budget to supporting the development of agricultural extension services, particularly those targeted at women.**

31. Sir John Beddington, former Government Chief Scientific Adviser, suggests that agricultural extension workers could promote methods of farming which prevent, or help to mitigate, land degradation.⁸⁹ Common signs of land degradation include polluted waterways and aquifers; increasingly saline soils; increasingly dry river basins; reductions in groundwater levels; and loss of crop biodiversity.⁹⁰ Land degradation leads to reduced crop yields and increased requirements for fertilisers. Degradation now affects one-quarter of total global land area; almost half of the world's poor depend on degraded lands.⁹¹ Farmers can use a variety of techniques to reduce the risk of degradation, including organic soil fertility management; low cost (solar panel) drip irrigation; and the use of wastewater for agricultural purposes.⁹² Terracing, examples of which we heard about during our recent visits to both Ethiopia and Rwanda, might also be useful in this respect. **We recommend that DFID ensure that the agricultural extension workers whose work it supports address the issue of land degradation in their work.**

Integration with agribusiness

32. Much of the food produced by smallholders is used for subsistence purposes. However, very few farmers focus entirely on subsistence production.⁹³ Some of the evidence we received emphasised the need to integrate smallholders more effectively into markets. For example, Dr Fan stresses the need to 'convert[...] smallholder farmers into profitable businesses.'⁹⁴ For a majority of smallholders, this means domestic markets.⁹⁵ For a small but potentially increasing number of better-off smallholders, however, this means large corporations. As Business Action for Africa highlights, buying from smallholders is an

85 Ev w35

86 Ev 95

87 Ev w35

88 Ev w35

89 Ev 95

90 Ev 92

91 Ev 60

92 Ev 61

93 Q 24

94 Q 106; Ev 61

95 Ev w40

attractive option for corporations. As well as providing them with access to raw materials, using smallholders as suppliers as helps corporations to appeal to ‘ethical’ consumers.⁹⁶ The brewing corporation SABMiller sources supplies from 32,000 smallholders in Africa, India and Latin America, while Export Trading Group (ETG), in which CDC has invested, procured 80% of its African-sourced stock from smallholders.⁹⁷

33. The formation of farmer organisations (e.g. co-operatives) has a key role to play in assisting smallholders to engage with corporations, as it reduces the transaction costs.⁹⁸ Only 10% of smallholders currently belong to such an organisation.⁹⁹ In his evidence Dr Fan underlined the need to build the management capacity of farmer organisations, and to strengthen their ability to negotiate with banks, credit unions, supermarkets and the like.¹⁰⁰ The International Fertilizer Development Center (IFDC), an NGO, has played an important role in building the capacity of farmer organisations in Mozambique.¹⁰¹ As Business Action for Africa highlights, farmer organisations must be representative (e.g. inclusive of women and marginalised farmers); fairly and transparently governed; and effective.¹⁰² **If we are to help smallholders to engage with large corporations, supporting the development of farmer organisations, including co-operatives, is vital. We recommend that DFID support the formation of farmer organisations, and seek to ensure that such organisations are fairly and transparently governed, with fair representation for women and marginalised farmers.**

34. Donors can support the engagement between corporations and smallholders in a number of ways. There are a number of examples of this. Working with SABMiller, the Africa Enterprise Challenge Fund (AECF), part-funded by DFID, has offered co-investment for pilot projects; provided funding for R&D for new models; funded the creation of and provided of training for smallholder groups; and funded corporate outreach work to farmers.¹⁰³ **The Africa Enterprise Challenge Fund (AECF), part-funded by DFID, has played a key role in helping smallholders to engage in corporate value chains. DFID should scale up its funding for initiatives such as AECF which help smallholders to engage with corporations.**

35. Supplying large corporations provides a number of benefits to smallholders. Most obviously, it provides them access to high-yielding seeds and fertiliser, and to training.¹⁰⁴ Smallholders who supply large corporations may enjoy better access to finance; they are also likely to have a more nutritious diet.¹⁰⁵ However, the Fairtrade Foundation documents a number of the challenges smallholders face in their interactions with corporations. It suggests that smallholders be provided with information on what happens to their produce

96 Ev w107

97 Ev w108

98 Ev w108

99 Ev w108

100 Q 108

101 Ev w109

102 Ev w108

103 Ev w109

104 Ev w107

105 Ev w107

after sale, as well as information on global markets and commodity prices.¹⁰⁶ During our visit to Ethiopia we saw the use of electronic display boards in the provinces, to provide live market information about agricultural commodity prices in the capital. Mobile technology could also play a role:¹⁰⁷ the Parliamentary Under-Secretary of State for International Development underlined its potential in her evidence.¹⁰⁸ Business Action for Africa suggests that smallholder groups have an important role to play in ensuring their members receive a fair share of the final profit: co-operatives should only enter into carefully-drafted contracts, adherence to which they are able to monitor.¹⁰⁹ **Smallholders should be provided with information on global markets. We welcome the Parliamentary Under-Secretary of State for International Development’s acknowledgement of the potential of mobile technology; this can play a key role in providing access to market information to smallholders.**

36. The Fairtrade Foundation also makes a number of more general recommendations as to how smallholders might best be supported:

- a) Companies which purchase crops from smallholders should offer payment in regular instalments throughout the year, rather than simply paying at harvest time;
- b) As a form of pre-financing, companies should consider paying smallholders in advance, as a way of providing them with access to credit. The Fairtrade Foundation already operates this system: studies have shown that the smallholders with which it works have better access to credit and are more credit-worthy.¹¹⁰

We support the recommendations of the Fairtrade Foundation: companies which purchase crops from smallholders should contract to offer payment in regular instalments throughout the year, rather than simply paying at harvest time, and companies should also consider contracting to pay smallholders in advance.

Price stabilisation

37. Price stabilisation refers to a process whereby farmers are offered guaranteed prices for their crops, such as via a public marketing board. Some argue that this provides farmers with a degree of certainty and hence enables them to invest in their farms.¹¹¹ However, the Organisation for Economic Co-operation and Development (OECD) is less enthusiastic about price stabilisation, arguing that it undermines the development of risk management by farmers, and can destabilise world markets. It argues that price stabilisation should only ever be used for a restricted period of time with a ‘clear exit strategy’.¹¹² In a report last year, we found that price stabilisation in Zambia had been highly problematic:

106 Ev w34

107 “M-Farm: giving Kenyan farmers the right connections”, New Agriculturalist, March 2013, www.new-ag.info

108 Q 169

109 Ev w109

110 Ev w34

111 Qq 28–31

112 Ev w56

In 2010 the Government's floor price for maize was set \$100 per tonne above the regional market price. Following the record maize harvest in 2010 the Government was forced to buy 840,000 metric tonnes at a cost of \$280million. While some is being exported, there will be a net loss to the Zambian treasury of around \$140million (about 1% of GDP).¹¹³

Such objections, however, relate specifically to public sector price stabilisation. An alternative option is private sector price stabilisation, whereby corporations (as opposed to public marketing boards) offer guaranteed prices to farmers. The Fairtrade Foundation reports that in 29 out of 33 impact studies, price stabilisation benefited the income of Fairtrade producers.¹¹⁴ The Parliamentary Under-Secretary of State for International Development acknowledged the potential of such schemes, and stressed that companies might also guarantee to buy a certain quantity, or quota, of crop from smallholders.¹¹⁵ **Offering smallholders a guaranteed price for their crop encourages them to invest in their farms, but price guarantees offered by the public sector are often problematic. Price guarantees offered by private companies are preferable. We recommend that DFID encourage more of its private sector partners to offer guaranteed prices to smallholders, or to guarantee to buy a certain quota of crop.**

Large-scale commercial farming

Contribution to food security

38. Many argue that large-scale agricultural investment is beneficial for food security. The OECD sees commercial investment in agriculture as a welcome departure from decades of underinvestment in the sector.¹¹⁶ The All-Party Parliamentary Group on Agriculture and Food for Development highlight the benefits of a 'hub-and-spoke' model whereby large commercial farms outsource some of their work to smallholders in the surrounding area: this model is seen as low-risk.¹¹⁷

39. Others are less convinced: it is argued that large commercial farms¹¹⁸ (and indeed large fishing companies¹¹⁹) export much of their produce.¹²⁰ Oxfam argues that much of the food which is exported is in fact desperately needed on local markets.¹²¹ However, it is argued

113 International Development Committee, Fifth Report of Session 2012-13, DFID's programme in Zambia, HC 119, para 12-14

114 Ev w33

115 Q 200

116 Ev w56

117 Ev w12

118 Ev 65

119 Ev 82

120 Ev 65

121 Ev 65

that some degree of consolidation (i.e. a shift towards a smaller number of larger farms) may improve the efficiency of the agricultural sector.¹²²

40. Both small- and large-scale farms have a role to play in feeding a growing population sustainably and in reducing rural poverty. For most countries a mixture of the two will be most appropriate. Determining the precise balance between small-scale and large-scale farms is a matter for each individual country: it is not our place to lecture developing countries about how their agricultural sectors should be structured. In some cases, a shift towards somewhat larger farms is likely to increase food production and improve the efficiency of the agricultural sector. However, in many cases, smallholders will retain a key role. In all cases, the generation of employment and the productive use of land will be paramount.

Concerns about changing land use and tenure

41. In many developing countries, large corporations are buying up areas of land previously farmed by smallholders.¹²³ In some countries it is primarily domestic corporations which invest in agriculture in this way, whereas in other countries multinational corporations predominate.¹²⁴ Some raise concerns about the implications of such investment. It is argued that much of the land acquired by corporations is either used to grow non-food crops¹²⁵ or not farmed at all¹²⁶; this would clearly have major implications for food security. Some refer to large-scale commercial land acquisitions as 'land grabs';¹²⁷ the UK Food Group claims that: 'Far too often the land grabs have displaced people, without genuine prior informed consent, through forced evictions and without adequate compensation.'¹²⁸ Oxfam, citing World Bank analysis, argues that:

most land deals happen in countries with the weakest protection of rural land rights and promised benefits rarely materialise; large-scale land acquisitions and abuse of land rights go together all too often. Affected communities rarely have a say, and women are the least likely to be consulted even though they are often the most seriously affected.¹²⁹

In a speech outlining the UK's priorities for its Presidency of the G8 during 2013, the Prime Minister said: 'we're going to push for more transparency [...] on who's buying up land and for what purpose.'¹³⁰ In her evidence to this Committee, the Parliamentary Under-Secretary of State for International Development said: 'what we are really pushing

122 Ev w91; Paul Collier and Stefan Dercon, "African Agriculture in 50 years: Smallholders in a Rapidly Changing World?" (UN FAO, 2009)

123 Q 56

124 Q 56

125 Ev w45-46

126 Ev 65

127 Ev 64, 77; Ev w2

128 Ev 77

129 Ev 64-65

130 "Prime Minister David Cameron's speech to the World Economic Forum in Davos", *Inside Government*, 24 January 2013, www.gov.uk

for is effectively an open, worldwide land register.¹³¹ With respect to land transparency, two key issues have been raised. The first is the extent to which donor money is used to finance land deals; the second is the conduct of investors.¹³² **We welcome the G8's focus on transparency. We recommend that the Government require UK-domiciled corporations to be transparent about land deals, and that it use its influence to ensure that the World Bank meets adequate standards of transparency and consultation in its own investments.**

42. An important step towards protecting the rights of smallholders would be the implementation of the UN Voluntary Guidelines on the Governance of Tenure. The principles of the Voluntary Guidelines are as follows:

- a) Recognise and respect all legitimate tenure rights and the people who hold them;
- b) Safeguard legitimate tenure rights against threats;
- c) Promote and facilitate the enjoyment of legitimate tenure rights;
- d) Provide access to justice when tenure rights are infringed upon;
- e) Prevent tenure disputes, violent conflicts and opportunities for corruption¹³³

The Voluntary Guidelines are not legally binding, but provide a basis which states can use when drafting their own national guidelines. They also provide a means against which national governments can be held to account.¹³⁴ In his evidence Max Lawson, Head of Policy and Advocacy at Oxfam, argued that developing countries should be provided with aid to help them to implement the Voluntary Guidelines.¹³⁵ The Parliamentary Under-Secretary of State for International Development told us that the Government would be pushing for implementation of the Voluntary Guidelines at the G8 summit,¹³⁶ and that it would work with developing countries on their implementation.¹³⁷ **Implementation of the UN Voluntary Guidelines on the Governance of Tenure would help to mitigate current concerns about commercial land acquisitions. We welcome the Government's support for the Voluntary Guidelines, and were pleased to be told by the Parliamentary Under-Secretary of State for International Development that the issue would be discussed during the forthcoming G8 summit. We ask the Government to explain the outcome of these discussions to us in its response to this report.**

131 Q 175

132 Ev 65

133 UN FAO, Voluntary Guidelines on the Governance of Tenure: At a glance, p 6

134 UN FAO, Voluntary Guidelines on the Governance of Tenure: At a glance, pp 2, 8

135 Q 19

136 Q 176

137 Q 177

Creating an enabling environment

Land tenure

43. Work to improve smallholders' security of tenure through land registers is critical to food security. Security of tenure provides smallholders with an asset against which to borrow, while also enabling them to invest in their land: as Business Action for Africa highlights, smallholders who lack secure tenure are often reluctant to invest in better seeds or machinery.¹³⁸ Additionally, security of tenure provides smallholders with greater security against 'land grabs'.¹³⁹ In her evidence Dr. Camilla Toulmin, Director of the International Institute for Environment and Development (IIED), underlined the importance of collective tenure of shared lands, especially for groups such as nomadic pastoralist communities.¹⁴⁰ DFID implemented a £40 million project on land tenure in Rwanda;¹⁴¹ in its written evidence, it tells us that it is currently designing a similar programme in Ethiopia. In total, DFID works on land and property rights in eight countries.¹⁴² **Work to establish land registers which improve smallholders' security of tenure, such as that conducted by DFID in Rwanda, has a dual benefit: it enables smallholders to invest in their land while also providing them with greater security against so-called 'land grabs'. We welcome the news that DFID is designing a similar programme in Ethiopia, and we suggest that it consider launching additional projects of this nature elsewhere.**

Infrastructure

44. The relationship between infrastructural development and food security is widely recognised.¹⁴³ Professor Tim Lang stressed the importance of roads.¹⁴⁴ The 2011 Foresight report on 'The Future of Food and Farming' stresses the importance of ports and ICT.¹⁴⁵ Improvements to roads, ICT (to provide market information) and storage, it is argued, would lead to considerable reductions in post-harvest losses of food.¹⁴⁶

45. The question of access to water and irrigation is also of great importance: estimates indicate that by 2050, supply of irrigated water will be just 66% of demand.¹⁴⁷ In its 2007 report on Sanitation and Water, our predecessor Committee found that only 3.7% of arable land in sub-Saharan Africa was irrigated, compared to 26% in India and 44% in China. The Committee recommended a 50% increase in funding for irrigation by 2010; it also

138 Ev w107

139 Ev w12

140 Q 43

141 Ev w18

142 Ev 108

143 Q 106; Ev w57, w89; Foresight, *The Future of Food and Farming: Challenges and choices for global sustainability*, January 2011, p 12

144 Q 45

145 Foresight, *The Future of Food and Farming: Challenges and choices for global sustainability*, January 2011, p 17

146 Foresight, *The Future of Food and Farming: Challenges and choices for global sustainability*, January 2011, p 95

147 Ev 59

recommended the use of national water resources management strategies for efficient community-level use.¹⁴⁸

46. Groundwater reserves are potentially of great value, as highlighted by the report of our predecessor Committee.¹⁴⁹ The British Geological Survey has recently discovered large-scale groundwater reserves in Africa. In their evidence Dr Toulmin and Sir John Beddington, then Government Chief Scientific Adviser, argued that these resources had great potential¹⁵⁰ (though Sir John warned that similar resources in India had become saline due to over-exploitation, while Dr Fan warns of the risks of pollution)¹⁵¹. Mapping of aquifers is constrained by the shortage of local hydrogeologists,¹⁵² whilst in Africa, the number of World Meteorological Organisation climate stations per thousand square kilometres is only one-eighth of the recommended level.¹⁵³ **We warmly welcome the discovery of large-scale groundwater reserves in Africa by the British Geological Survey. In the long-term, this discovery may have major benefits for food security. DFID should support the development of scientific knowledge and capacity in these areas. For example, DFID could support an increase in the number of climate stations, and the training of hydrogeologists.**

47. On a more general level, low-tech solutions are often tremendously successful in improving access to water and irrigation.¹⁵⁴ In Gansu province in China, for example, surface run-off is captured in a catchment and stored in underground tanks. We were told that this had been extremely successful.¹⁵⁵

48. The question of food storage is also of great importance. WFP and FAO have recognised this and are working to improve storage facilities at various levels: WFP is working with smallholder associations on community storage, while FAO is supporting on-farm storage and larger bulk storage facilities.¹⁵⁶ As Dr Fan highlights, technology can be harnessed to improve storage.¹⁵⁷ Low-tech solutions can be equally important: during our visit to Afghanistan in 2012, we were told about a simple system for potato storage which had been very effective. Improving storage facilities has dual benefits: it reduces the risk of food insecurity while also reducing waste.¹⁵⁸

49. Improving rural infrastructure would have a dramatic effect on food security. Across much of the developing world, inadequate roads and storage facilities lead to large-scale post-harvest crop losses. Particularly in Africa, a lack of irrigation

148 International Development Committee, Sixth Report of Session 2006-07, Sanitation and Water, HC 126-I, para 162

149 International Development Committee, Sixth Report of Session 2006-07, Sanitation and Water, HC 126-I, para 129

150 Qq 45, 120

151 Q 120; Ev 59

152 *Water Adaptation in Africa*, POSTnote 373, Parliamentary Office of Science and Technology, April 2011

153 All Party Parliamentary Group on Agriculture and Food for Development, *Growing Out of Poverty*, February 2012, p11

154 Qq 92, 122

155 Qq 108, 122

156 Q 91

157 Ev 61

158 Ev w40

undermines agricultural productivity. DFID should give a higher priority to these issues.

Technology

50. There is a debate as to the contribution genetically modified organisms (GMOs) can, or cannot, make to global food security. Organisations such as the UK Food Group are opposed to their use,¹⁵⁹ while a report published as part of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) argues that the link between GMOs and higher yields has never been definitively proven.¹⁶⁰ In its written evidence, Friends of the Earth claims that none of the GMOs presently on the market are designed with increased drought resistant or improved yields in mind; instead the focus has been on resistance to pests.¹⁶¹ Friends of the Earth in fact argues that yields of genetically modified soya beans are 5-10% lower than yields of conventional soya beans.¹⁶² Additionally, the use of GMOs may prevent farmers from using the previous year's produce as seed.¹⁶³

51. However, the Agricultural Biotechnology Council claims that resistance to pests and disease leads to higher yields,¹⁶⁴ while Research Councils UK argue that pest-resistant crops such as aphid-resistant wheat reduce pesticide use.¹⁶⁵ The Agricultural Biotechnology Council states that GMOs led to the production of 229 million tons of additional food, feed and fibre between 1996 and 2009. Were it not for the use of GMOs, 75 million hectares of additional land would have had to be cultivated to achieve this level of output. The inevitable consequence of this would have been deforestation.¹⁶⁶

52. At our last evidence session, witnesses were highly critical of some of the main arguments against GMOs. Kanayo Nwanze, President of IFAD, and Dr Fan both pointed out that GMOs had been used in medicine for many years.¹⁶⁷ Sir John Beddington said:

I think that there is a real dilemma here that there are organisations, particularly non-government organisations but also Governments, that in a sense believe that anything involving genetic modification is wrong. That is a fundamental misconception. I think that the key here is that we should ask questions about any genetically modified organism. Could that have been developed by conventional breeding? Is it safe? Is it sustainable? Is it safe for human health? The answers to those questions are for an individual organism not the technology as a whole. I think

159 Ev 74

160 Ev w45

161 Ev w45

162 Ev w45

163 "South Africa's Smallholders Lose Battle for Seed Security", *Reclaim the Fields*, 8 May 2012, www.reclaimthefields.org.uk

164 Ev w9

165 Ev w66

166 Ev w9

167 Q 118

it is very unfortunate that some NGOs take up a view that anything that involves genetic modification is wrong. It is a political view; it has no scientific basis. I think that is very unfortunate.¹⁶⁸

53. The Agricultural Biotechnology Council claims that some GMOs (e.g. those which are not global commodity crops), while beneficial in terms of food security, may not be commercially viable. It therefore advocates the use of public-private partnerships, with the companies involved waiving their intellectual property rights, in order to get these technologies off the ground.¹⁶⁹

54. We recognise that genetically modified organisms (GMOs) are controversial and clearly not a panacea. However, it could be argued that GMOs have the potential to make a valuable contribution to food security. DFID should ensure that any support it gives is beneficial to the poorest and most food insecure, and that any commercialisation or extension of GM seeds to smallholder farmers does not undermine their ability to save and store traditional seed varieties.

Research

55. DFID has an Agriculture Research Programme, which is comprised of the following four main strands:

- a) Approximately 15% of funding: research projects jointly with partners in developing countries, and with the UK Biotechnology and Biological Science Research Council (BBSRC), to provide the scientific basis for new technologies;
- b) Approximately 50% of funding: funding to international research organisations such as CGIAR (formerly the Consultative Group on International Agricultural Research), and to regional research organisations in Africa and Asia, for the development of new technologies;
- c) Approximately 25% of funding: providing farmers, especially women, with access to technology
- d) Approximately 10% of funding: research on agricultural policy.¹⁷⁰

56. Business Action for Africa argues that public investment in agricultural research should be increased.¹⁷¹ The Food Ethics Council also suggests that spending on research be scaled up, with smallholder participation in research as a necessary condition. It argues that smallholders' views should be taken into account when deciding what research to conduct.¹⁷² **Agricultural research has a key role to play in ensuring food security. We support the recommendation of the Food Ethics Council: DFID should make**

168 Q 117

169 Ev w10

170 Ev 103

171 Ev w109

172 Ev w41

agricultural research a high priority. We welcome the Government's current work on this, and we urge DFID and DEFRA to ensure that their work in this area is joined-up. Progress in agricultural research will have benefits in the UK as well as in developing countries.

Climate change

57. It is impossible to have a meaningful discussion about food security without considering the impact of climate change. The World Bank is now predicting an increase of over 3°C in global average temperatures,¹⁷³ and the speed of increase is faster than previously expected.¹⁷⁴ One-third of total greenhouse gas emissions are attributable to agriculture, such as emissions from livestock and emissions from agriculture-related deforestation.¹⁷⁵ The contribution of agriculture to climate change is expected to increase.¹⁷⁶ For the poorest people in the poorest countries, the effects of climate change are being felt sooner and more severely.¹⁷⁷ Climate change is making it more difficult for farmers to decide when to sow, cultivate and harvest their crops – dry periods are becoming longer and hotter, growing seasons are becoming shorter, and rainy seasons are becoming more difficult to predict.¹⁷⁸ Fertile mega-deltas have been especially badly affected by rising sea levels, increasing temperatures and soil acidification.¹⁷⁹ Climate change is expected to have numerous other impacts on food security. Benny Dembitzer argues that it will lead to problems in terms of storage and distribution.¹⁸⁰ Climate change is expected to lead to greater reliance on trade or aid,¹⁸¹ while extreme weather events are likely to drive up food prices.¹⁸² WWF-UK argues that climate change will lead to the rapid movement of viruses like foot and mouth, bluetongue and avian flu; plant diseases such as those spread by whiteflies; and pests like diamond back moth.¹⁸³

58. Climate change mitigation is therefore of fundamental importance for food security. As Dr Toulmin told us:

At a time when Obama might be trying to bring the US slightly more on track with a global regime, we need as many progressive Governments to be saying that this stuff really matters and it matters now.¹⁸⁴

173 Ev w101

174 Q 47

175 Ev w101

176 Ev w101

177 Ev w101

178 Ev 63

179 Ev w101

180 Ev w16

181 Ev w90

182 Ev 63

183 Ev w101

184 Q 47

In his evidence to this Committee, Professor Dorward said:

We can now say, with a pretty firm degree of confidence, that the increased number of high temperature drought weather shocks we have had in the world in the past few years are related to and caused by climate change. We have tended to have one every other year for the past three or four years. What happens if we get two in the same year?¹⁸⁵

Through its International Climate Fund (ICF), the UK is providing £2.9 billion of funding to tackle climate change ('climate finance') during the period April 2011 – March 2015. £1.8 billion of this funding is provided by DFID.¹⁸⁶ In addition, at the Copenhagen conference in 2010, international agreement was reached to provide \$100 billion of climate finance, additional to aid, each year from 2020.¹⁸⁷ Tearfund suggests that this should be funded partly by a global tax on emissions from the shipping industry,¹⁸⁸ while Oxfam urges the UK Government to seek global agreement on carbon pricing for international transport.¹⁸⁹ **We welcome the Government's pledge to provide £1.8 billion of funding to tackle climate change over the next two years. Making detailed recommendations as to how this money should be spent is beyond the remit of this report; however, it is crucial that the Government sticks to its pledge. The Government should also work with its international partners to ensure that the commitments made at the Copenhagen conference are met.**

59. Agriculture can make a valuable contribution to climate change mitigation.¹⁹⁰ Sir John Beddington argued that farmers should be encouraged to engage in agroforestry— using trees and shrubs alongside crops and/or livestock, with a view to improving carbon sequestration. Sir John Beddington and Dr Foulmin both stressed the importance of creating incentives to encourage farmers to engage in such practices.¹⁹¹ In 2010 the World Bank made a similar argument, stressing the importance of offering farmers incentives to intensify production on a smaller land area while protecting surrounding grasslands and forests.¹⁹² Agroforestry also offers a much-needed opportunity to conserve biodiversity;¹⁹³ estimates indicate that the genetic diversity of agricultural crops has declined by 75% over the last 100 years.¹⁹⁴ **While much discussion focuses on the implications of climate change for agricultural productivity, DFID should not lose sight of the fact that agriculture can in fact make a valuable contribution to climate change mitigation. Agroforestry, for example, can help to improve carbon sequestration. Where appropriate DFID should support models of agricultural production that have the potential to contribute to emissions reductions.**

185 Q 51

186 "Taking international action to mitigate climate change", *Inside Government*, 20 May 2013, www.gov.uk

187 Ev w82

188 Ev w82

189 Ev 63

190 Q 114

191 Q 52; Ev 95

192 Ev 96

193 GFS 06

194 Ev w102

60. Farmers can boost their resilience to climate change in a variety of ways including crop diversification; insurance;¹⁹⁵ improved land management; more appropriate planting dates; and the use of more resilient crop varieties.¹⁹⁶ **For farmers, improving levels of resilience to climate change is vital. DFID should help farmers to boost their resilience through techniques such as crop diversification, insurance, improved land management, more appropriate planting dates, and the use of more resilient crop varieties.**

Implications

61. As this chapter has illustrated, there are a number of structural factors affecting demand for and supply of food. As a consequence, food prices have been increasing, a trend which is expected to continue for many years to come.¹⁹⁷ Research indicates that staple crops could double in price by 2030, with half of this increase attributable to the effects of climate change.¹⁹⁸

62. In this context, it will be imperative for the international community to support measures both to curb the projected increases in demand and to increase the supply of food. It is widely argued, for example, that food production will have to increase by 60-70% by 2050.¹⁹⁹

195 Ev w90

196 Ev 61

197 Ev 86-87

198 Ev 63

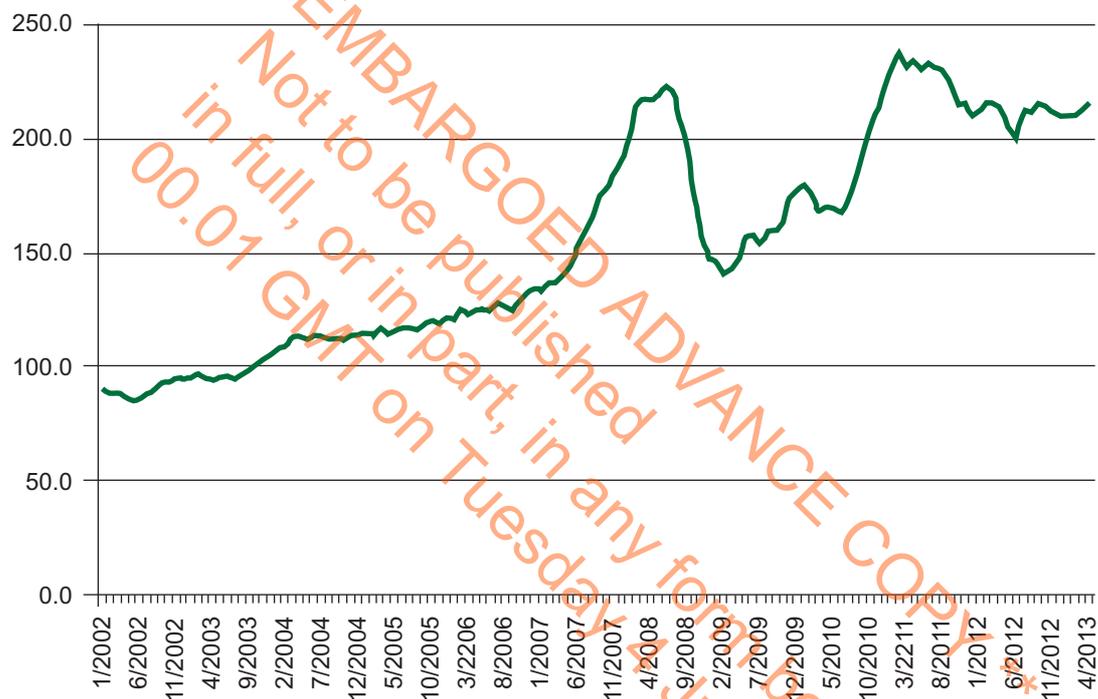
199 Q 160

3 Shocks and their drivers

Recent shocks and their impacts

64. Recent years have seen increasing levels of food price volatility. The FAO Food Price Index measures average global food prices, and as the graph below shows, there have been two notable price ‘shocks’ or ‘spikes’ in recent years, the first peaking in June 2008 and the second peaking in February 2011.²⁰⁰ The food price spike of 2008, in particular, took most observers by surprise.²⁰¹

Figure 1: FAO Food Price Index



Data source: FAO data.

The Food Price Index is composed of an aggregate of five separate FAO indices—the Meat Price Index; the Dairy Price Index; the Cereals Price Index; the Oils Price Index; and the Sugar Price Index. Graphs showing the changes in each of these indices are included as an Annex to this report. Of the five indices, the Dairy Price Index and the Sugar Price Index have shown the most dramatic increases: they stood at 258.8 and 252.6 respectively in April 2013, meaning price increases of 158.8% and 152.6% respectively 2002-04. The Meat Price Index has shown the least dramatic increase: the Index stood at 178.7 in April 2013, meaning an increase of 75.7% in meat prices since 2002-04.²⁰²

65. According to research by the FAO, the 2008 price spike led to stagnation in the fight against hunger: while the proportion of the global population suffering from hunger had

200 "FAO Food Price Index", Food and Agriculture Organization of the United Nations, www.fao.org

201 Qq 43-44

202 "FAO Food Price Index", Food and Agriculture Organization of the United Nations, www.fao.org

been declining before the price spike, the rate of progress declined when the spike occurred. The effect was especially marked in sub-Saharan Africa: the hunger rate had been declining before the price spike, but began to rise by 2% per year from 2007.²⁰³

66. While conventionally one would assume that an increase in food prices benefits net sellers of food, this may not have been the case in this instance, since the cost of agricultural inputs also increased.²⁰⁴ Oxfam argues that many farmers were forced to sell their produce when prices were low, and thus found themselves having to buy once the price spike struck.²⁰⁵ In Southern and East Africa, furthermore, most farmers are in fact net buyers of food in any case.²⁰⁶

Drivers of shocks

Tightening balance between supply and demand

67. In the previous chapter we illustrated various ways in which the balance between supply and demand was tightened. The consequence of this was that food prices became vulnerable to destabilising shocks and began to increase.²⁰⁷ As we will see in this chapter, some of the policy responses to this price increase not only failed to solve the problem, but in fact served to exacerbate it.

Low stocks

68. Small-scale food stocks are commonly maintained for humanitarian purposes: this will be discussed in Chapter 4. What we are concerned with here is the question of larger-scale food stocks, and the extent to which they might be used to reduce food price volatility. At present, levels of food stocks are low.²⁰⁸ Referring to the UK, Professor Lang told us: “We do not store, actually, it is all on the motorway. We have a just-in-time system of food.”²⁰⁹ The following graph shows how stock-to-use ratios for key crops (stock levels as a percentage of annual consumption) have fluctuated over recent years:

203 UN FAO, *The State of Food Insecurity in the World*, 2012, p 11

204 Ev 64

205 Ev 64

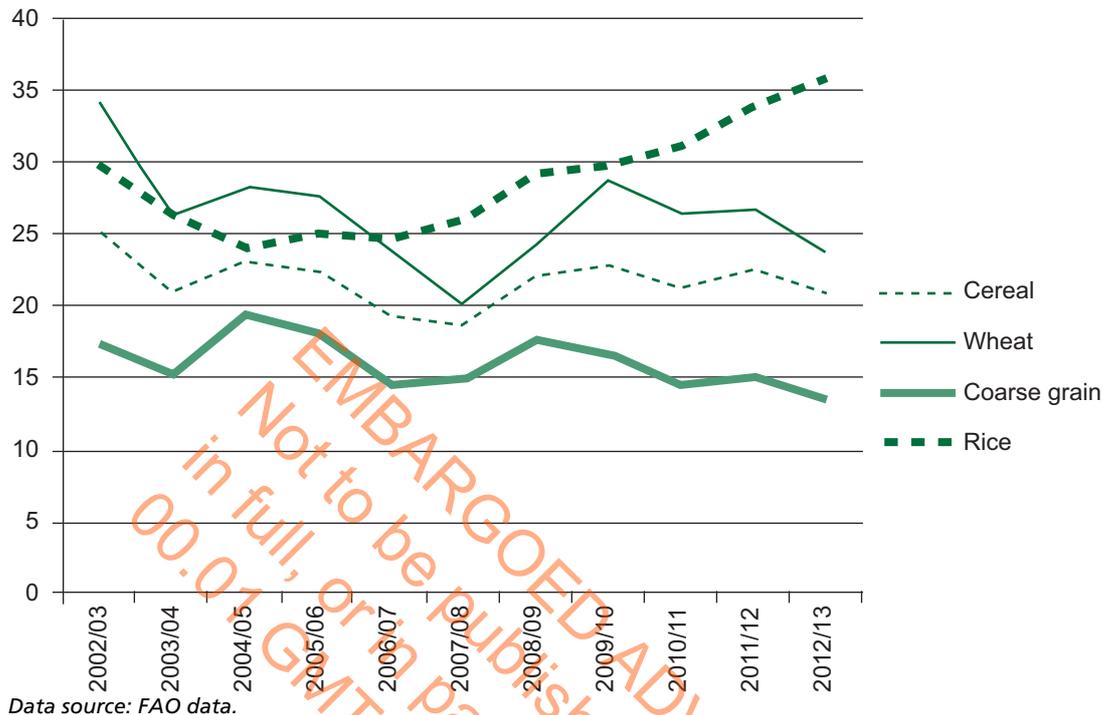
206 Ev 99

207 Qq 2, 43

208 “FAO Cereal Supply and Demand”, UN FAO, 9 May 2013, www.fao.org

209 Q 45

Figure 2: Global stock-to-use ratios (%) for key crops



69. Stocks are important in helping to avoid price volatility; in his evidence Dr Fan argued that stocks were of ‘fundamental’ importance in this respect.²¹⁰ Professor Dorward agreed, arguing that while stocks can sometimes be inefficient and expensive, they nevertheless serve the purpose of relieving the ‘tightness’ in markets and thus reducing volatility.²¹¹ Some argue that the availability of stocks in China and India helped to mitigate the impact of the 2008 food price spike for these countries.²¹² However, witnesses from DFID, FAO and WFP were unenthusiastic about large-scale stocks.²¹³ **We recognise that maintaining large-scale food stocks can sometimes be problematic and costly. However, given the increasing volatility of food prices over recent years, we believe there may be a case for judicious use of stocks to relieve the tightness of markets. We recommend that the Government conduct further research into this. Specifically, the Government should consider under what circumstances it would be appropriate for a national government to pursue strategic stockholding for national food security purposes. It should consider what the costs, risks and benefits of this strategy would be, and what capacities would be required.**

70. In 2011, the G20 formed the Agricultural Market Information System (AMIS):²¹⁴ participant countries include all members of the G20 plus Spain, together with seven major agricultural exporters and importers (Philippines, Thailand, Nigeria, Egypt, Kazakhstan, Vietnam and Ukraine). AMIS has received funding from a variety of sources including

210 Qq 88, 123

211 Q 58

212 Q 87

213 Qq 87, 204

214 Ev 104

FAO, the Bill & Melinda Gates Foundation, the World Bank, the OECD, IFAD, and the Governments of Japan and France. Under AMIS, participating countries are required to provide monthly data on consumption, production, exports, imports, prices and stocks of 'AMIS crops' (maize, rice, wheat, soybeans). This data is then analysed and used to prepare short-term market forecasts for AMIS crops. AMIS also includes a Rapid Response Forum (RRF) consisting of senior officials from participating countries: the RRF meets annually, or more frequently if necessary, to discuss policy co-ordination.²¹⁵ In the long term, the success of AMIS will be dependent on the quality of information provided by participating countries.²¹⁶ In countries such as China and India, governments may lack accurate information as to the levels of stocks which exist on their countries' farms:²¹⁷ Professor Stefan Dercon, Chief Economist at DFID, argued that misinformation about the level of stocks in China in fact contributed to the 2008 price spike.²¹⁸

71. The launch of the Agricultural Market Information System (AMIS) is a major step forward in the fight against food price volatility. We commend all participant countries for supporting this initiative, but we recognise that its long-term success will depend upon the quality of information provided by participant countries.

Export controls

72. Food price increases have been exacerbated by the introduction of export bans by certain countries: in Russia, for example, cereal exports were outlawed in 2010.²¹⁹ The introduction of export bans led to a tightening of the market for other exporters, and encouraged importers to begin 'panic buying', thus driving prices up further.²²⁰ Moreover, Dr Fan argues that export bans 'tend to inhibit a domestic production response.'²²¹ In its written evidence, the OECD argues that:

Recent evidence suggests that the aggregate result of exporting countries imposing export restrictions, and importers temporarily reducing tariffs, has been equivalent to spectators standing up in a stadium in order to see better. The first movers may have had some advantage, but in the end there has been little benefit to adopters of those policies, while non-adopters have suffered and more countries have lost than have gained.²²²

More recently, there has been some progress in respect of reversing these damaging policies. At the G20 summit in 2011, it was agreed to remove any export bans or special taxes for food purchased by the WFP.²²³ **The introduction of export controls by certain**

215 Agricultural Market Information System (AMIS), FAO Information Brief, April 2013, www.fao.org

216 Q 99

217 Q 124

218 Q 204

219 Ev 93

220 Ev 62

221 Ev 62

222 Ev w59

223 Ev 93

countries was regrettable, and served to make an already bad situation worse. The decision by the G20 to remove any export bans for food purchased by the World Food Programme is a welcome step in the right direction, but more needs to be done. The UK should encourage its international partners to remove any remaining export bans and to dissuade them from introducing any new ones. It should also commit to raising this issue at the forthcoming G8 summit.

Speculation

73. Some argue that financial speculation on food commodities may have contributed to food price increases, and that such speculation should thus be regulated. Christopher Gilbert, Professor of Econometrics at the University of Trento, has argued that speculation caused the prices of wheat, corn and soybeans to increase by up to 16.9%, 15.8% and 14.8% respectively between January 2006 and December 2008.²²⁴ Excessive speculation is likely to distort the price discovery function of derivative markets,²²⁵ which will result in misinformed planting decisions. Lawrence Haddad, Director of the Institute of Development Studies, has suggested a tax on food price speculation, albeit one linked to the speed of flows rather than their levels.²²⁶ The World Development Movement, meanwhile, suggests that the UK and EU authorities should require all deals involving food derivatives to be cleared by a transparent, central clearing house.²²⁷ In his evidence to this Committee, Patrick Mulvany, co-Chair of the UK Food Group, argued that the UK should impose ‘position limits’ – legal limits on the quantities which can be held by speculators.²²⁸

74. However, there are different views. Whilst speculation does appear to have led to price increases in the short term,²²⁹ its long-term effects are far less clear. In a separate paper, Professor Gilbert finds no evidence to support the contention that index investments led to speculative bubbles on the US future markets for food crops.²³⁰ A 2012 paper by Aulerich, Irwin and Garcia drew a similar conclusion.²³¹ Moreover, some argue that the imposition of excessively low position limits runs the risk of undermining hedgers’ liquidity,²³² thus reducing the potential of hedging as a risk-management strategy. The Parliamentary Under-Secretary of State for International Development argued that speculation was not a major factor in food price increases,²³³ and told us that the Government did not intend to

224 Christopher Gilbert, *Speculative Influences on Commodity Future Prices 2006-2008* (United Nations Conference on Trade and Development, 2010), p 26

225 Institute for Agriculture and Trade Policy, *Excessive Speculation in Agriculture Commodities: selected writings from 2008-2011*, April 2011

226 Ev w50

227 Ev w44

228 Q 33

229 Testimony of Michael W. Masters before the Committee on Homeland Security and Governmental Affairs, United States Senate, 20 May 2008, www.hsgac.senate.gov

230 Christopher Gilbert, *Price Volatility and Farm Income Stabilisation: Modelling Outcomes and Assessing Market and Policy Based Responses* (Paper prepared for the 123rd EAAE Seminar, 2012)

231 Nicole Aulerich, Scott Irwin and Philip Garcia, *Bubbles, Food Prices, and Speculation: Evidence from the CFTC’s Daily Large Trader Data Files* (Paper prepared for presentation at the NBER Conference on “Economics of Food Price Volatility” in Seattle, WA, 2012)

232 Ev 82

233 Q 191

introduce position limits.²³⁴ **Evidence as to the impact of speculation on food prices is inconclusive. While there has been a proliferation of recent research on this topic, there is still no consensus. We recommend that the Government study the latest research in detail, and that it use this research to inform its future policy on this issue.**

Implications

75. As we have seen, the tightening of the balance between demand for and supply of food has led to increasing levels of food price volatility, while additional factors, in particular the imposition of export controls, have served to exacerbate the situation. It will be important for the UK to use its influence on the international stage to discourage the adoption of similar policies in future. The Government should also conduct further research on some of the more contentious issues we have raised in this chapter, namely food stocks and speculation.

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4 Protecting the vulnerable from shocks

76. In the previous two chapters we saw that there has been a progressive tightening of the balance between demand for and supply of food, leading to food price shocks. In this chapter we will consider the impacts of shocks on the poorest and most vulnerable, and consider how best these impacts might be reduced.

Social protection

77. When shocks occur, the poor may have to sell their assets (e.g. livestock) in order to buy food. The loss of their assets increases their vulnerability to future shocks. The provision of social protection, including cash transfers and other social insurance and social welfare schemes, seeks to reduce the need for the poor to sell their assets.²³⁵ It can also contribute to food security in various other ways such as helping households to save, invest in productive assets and obtain better credit terms.²³⁶ At present, 60% of people in developing countries lack access to social protection, including 75% of households in sub-Saharan Africa.²³⁷

78. Social protection schemes often make a valuable contribution to food security. In Brazil, the coupon-based Bolsa Familia scheme played a key role in reducing hunger over a number of years.²³⁸ We recently visited Ethiopia, where we heard about the Productive Safety Net Programme (PSNP). This programme was seen as a key factor in mitigating the impact of the 2011 Horn of Africa drought within Ethiopia.²³⁹ For further details about PSNP, see Box 3.

Box 3

Social protection: the Productive Safety Net Programme (PSNP) in Ethiopia

During our visit to Ethiopia we were told about the Productive Safety Net Programme (PSNP). Under PSNP, beneficiary households receive a cash transfer of around 2,350 Birr per year, in return for contributing up to five days' labour per month on public works programmes, including construction of roads, schools and health posts. Construction of roads has provided villagers with better access to markets, allowing them to get a better price for their produce. The public works programmes have also including the fencing-off of water points to prevent contamination of water-supplies by livestock. This has led to declining prevalence of water-borne diseases.

PSNP also provides larger cash transfers to those who are unable to work (due to age, illness, disability or pregnancy). The first stage of PSNP, operational between 2005 and 2009, reached between 4 and 5 million beneficiaries per year; the second stage, operational since 2010, has reached on average 7.5 million beneficiaries per year. The scheme currently covers half of all rural Ethiopian districts.

PSNP is funded jointly by the Government of Ethiopia and ten donor organisations. The total cost of PSNP is £1.4 billion over the current (2010-14) five year phase, of which £210 million is provided by DFID.

235 Q 34; Ev w26-27

236 Ev w27

237 Ev 85

238 Ev w17

239 Rob Bailey, *Managing Famine Risk* (Chatham House, 2013), p 33

79. DFID plans to fund social protection in 15 countries by 2014. This represents a significant increase since 2009, when it was only funding social protection in nine countries,²⁴⁰ but nevertheless suggests that in 14 of the 29 countries in which DFID is currently working bilaterally,²⁴¹ it does not currently plan to fund social protection. In a recent report, we expressed our regret that DFID was not supporting cash transfers in Malawi.²⁴² **When shocks occur, social protection plays a vital role in protecting the food security of the poorest. In 14 of the 29 countries in which it has bilateral programmes DFID does not currently plan to fund social protection. We ask the Department to explain the thinking behind this.**

Humanitarian assistance

80. When emergency interventions are needed to protect food security, assistance can either be provided ‘in kind’ (food aid) or via cash- and voucher-based schemes. WFP has traditionally provided conventional food aid, but since 2008, has been using cash and vouchers as well.²⁴³ WFP’s spending on these schemes increased from £27 million in 2009 to £134 million in 2011.²⁴⁴ Provided markets are functioning and beneficiaries are able to access markets, WFP regards these schemes as superior to food aid: they stimulate markets and allow beneficiaries to access a greater choice and variety of foodstuffs (e.g. fresh fruit, fresh vegetables, animal products). Moreover, conventional food aid creates challenges of cost and supply.²⁴⁵ **Where emergency interventions are needed to protect food security, cash- and voucher-based schemes are preferable to in-kind food aid provided markets are accessible and functioning. Where appropriate, we recommend that DFID and its partner organisations favour cash- and voucher-based schemes over in-kind food aid.**

81. Where in-kind food assistance is required, there are many advantages in purchasing food locally from developing country suppliers. In his recent Budget, US President Barack Obama announced that the US would scale up its procurement of food aid from developing country suppliers.²⁴⁶ WFP, under its Purchase for Progress scheme, purchases its food from producers in developing countries either directly from farmers’ organisations (through direct contracts, forward contracts or ‘smallholder-friendly tenders’) or from traders or NGOs who work with smallholders.²⁴⁷ In Ethiopia, for example, WFP has signed forward delivery contracts to the value of \$12.3 million, with 16 co-operatives, whose total combined membership is 500 000 smallholders. These contracts have enabled the co-

240 Ev 100

241 “Department for International Development: What we do”, *Inside Government*, www.gov.uk

242 International Development Committee, Fifth Report of Session 2012-13, *The Development Situation in Malawi*, HC 118, Para 34

243 UN WFP, *Revolution: From Food Aid to Food Assistance*, 2010, p 4

244 Ev 87

245 Ev 87

246 Executive Office of the President of the United States, *Budget of the U.S. Government: Fiscal Year 2014*, p 133

247 “P4P Overview”, UN WFP, www.wfp.org

operatives to access bank loans; previously banks were only willing to lend to exporters.²⁴⁸ The scheme is currently being piloted in 20 countries (Burkina Faso, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Liberia, Malawi, Mali, Mozambique, Rwanda, Sierra Leone, South Sudan, Tanzania, Uganda, Zambia, Afghanistan, El Salvador, Guatemala, Honduras, Nicaragua).²⁴⁹ It is funded by a variety of donors, including DFID.²⁵⁰ An evaluation of the programme found that while there had been some challenges, there had been many positive impacts.²⁵¹ Ertharin Cousin, Executive Director of WFP, told us that she would scale up the Purchase for Progress scheme ‘in a heartbeat’ if donors were to make additional funds available.²⁵² The Parliamentary Under-Secretary of State for International Development described it as an ‘amazing project,’ and agreed to consider scaling up DFID’s support.²⁵³ **WFP’s ‘Purchase for Progress’ scheme has a double benefit: it supports WFP’s humanitarian work while also supporting local economies in developing countries. We were pleased that the Parliamentary Under-Secretary of State agreed to consider scaling up DFID’s support, and we reiterate our belief that this would be a wise thing for DFID to do.**

Urban food security

82. As we saw in Chapter 2, urbanisation is a key issue: by 2020 86% of population growth is expected to occur in large urban centres in developing countries. While peri-urban agriculture can play an important role,²⁵⁴ urban areas tend to depend more on the market for their food (as opposed to rural areas where a subsistence approach is more common), so the impact of price spikes is particularly stark in urban areas. Cash- and voucher-based schemes are especially appropriate in urban areas, and innovative new methods of targeting might be appropriate.²⁵⁵ **Given that urban food insecurity is increasingly common, we urge DFID to think give more consideration to how it provides social protection in urban areas. Cash- and voucher-based schemes are especially important in urban settings.**

Emergency food stocks

83. In the previous chapter we discussed the role of large-scale food stocks in reducing price volatility. Here we are concerned with smaller-scale food stocks maintained for humanitarian purposes. In his evidence Professor Stefan Dercon, DFID’s Chief Economist, expressed his support for humanitarian food stocks,²⁵⁶ as did other witnesses, including Ertharin Cousin, Executive Director of WFP and Daniel Gustafson, Deputy Director

248 Ev 90

249 “P4P Overview”, UN WFP, www.wfp.org

250 Ev 90; “P4P Overview”, UN WFP, www.wfp.org

251 UN WFP, *WFP 2008 – 2013 Purchase for Progress (P4P) Initiative: A Strategic Evaluation (mid-term)*, October 2011

252 Q 85

253 Q 207

254 UN FAO, *Profitability and sustainability of urban and peri-urban agriculture*, 2007

255 Ev 86

256 Q 203

General (Operations) of FAO.²⁵⁷ Professor Dercon argued that humanitarian food stocks should be sufficient for three to four months.²⁵⁸ An important issue to consider is who should administer food stocks, and where they should be stored. Professor Dercon argued that management by individual countries was most desirable, as this would give the countries concerned greater ownership of the policy.²⁵⁹ In terms of storage, IFPRI recommends that stocks be dispersed across the Global South.²⁶⁰ Professors Dorward and Lang echoed this, with the latter underlining the importance of ‘spreading where those stocks are and what the stocks are in.’²⁶¹ **The maintenance of food stocks for humanitarian purposes is of critical importance. These stocks should be managed by individual countries, as this gives the countries concerned greater ownership of the policy. Stocks should be stored on a decentralised basis. We recognise that some countries may lack the capacity to store and manage stocks satisfactorily; in these cases, we recommend that DFID support capacity building.**

Nutrition

84. Having access to an adequate quantity of food is not in itself a guarantee of food security if that food lacks the requisite nutritional quality. Inadequate access to important micronutrients (e.g. vitamins and minerals) gives rise to a phenomenon known as undernutrition. (Undernutrition can also be used in a more general sense, as an alternative term for hunger, but in this report all references to undernutrition refer to micronutrient deficiency.) Undernutrition is a common problem amongst the poor: in situations where the poor cannot afford a balanced diet, the first priority tends to be calorie-rich foods rather than nutritious foods.²⁶²

85. A distinction is drawn between acute undernutrition (transitory undernutrition, common during shocks) and chronic (long-term, irreversible) undernutrition.²⁶³ Conventional wisdom states that nutrition is especially important during the 1,000 day period between conception and a child’s second birthday;²⁶⁴ moreover, if chronic undernutrition can be prevented during this period, the risk of acute undernutrition also falls significantly.²⁶⁵ The latest research indicates that the risk of stunting in children is determined in part by maternal nutrition on the day of conception.²⁶⁶

86. Incidence of undernutrition is extremely high, with over 30% of the world’s population suffering.²⁶⁷ Undernutrition is profoundly damaging to both physical and mental

257 Q 87

258 Q 203

259 Q 206

260 Ev w18

261 Q 58

262 Q 34

263 Ev 98

264 Ev 55

265 Ev 88

266 Q 81

267 Ev w47. It should be noted that as well as referring to micronutrient deficiency, undernutrition is sometimes used as an alternative term for hunger. Throughout this report, however, ‘undernutrition’ refers to micronutrient deficiency.

development. One of the most obvious effects is stunting. In 2010 over 170 million children under the age of five— 26% of all the world’s children—suffered from stunting (slowed growth).²⁶⁸ In countries such as Ethiopia and Rwanda, over half of all children are stunted.²⁶⁹ Vitamin A deficiency, a consequence of a diet high in rice and low in fruit and vegetables, affects between 100 million and 140 million children worldwide. As a consequence up to 250 000 children lose their sight each year, with half of these dying within 12 months.²⁷⁰ In addition to its health implications, the scourge of undernutrition places a severe constraint on economic development. Some claim that undernutrition can reduce GDP by up to 10%.²⁷¹

87. In this context, the importance of tackling undernutrition is clear. WFP claims that initiatives to tackle chronic undernutrition offer returns on investment of anything between 15:1 and 139:1. WFP also argues that preventing undernutrition is significantly more cost-effective than curing it.²⁷² Micronutrient fortification represents a particularly effective method of tackling undernutrition. In his written evidence, Sir John Beddington extols the virtues of Quality Protein Maize (QPM): compared to conventional maize, QPM contains nearly 100% more usable protein.²⁷³ Efforts are currently underway to produce a number of other fortified crops, including wheat and rice high in zinc; beans and millet high in iron; and sweet potatoes and maize rich in beta-carotene, a precursor to Vitamin A.²⁷⁴ WFP provides fortified Corn Soya-Blend to pregnant women and new mothers, and argues that nutrition is especially important for lactating mothers.²⁷⁵ For children under the age of six months WFP encourages exclusive breastfeeding; for children between six months and two years, supplemental feeding is the preferred approach.²⁷⁶ **Undernutrition affects over 30% of the world’s population, and 26% of all the world’s children suffer from stunting. We find this quite shocking and wholly unacceptable. Undernutrition has long-term health implications; more broadly, it also represents a barrier to development. Combating the scourge of undernutrition should be a top priority for the international community. We welcome the forthcoming ‘Nutrition for Growth’ event, and urge participants in the event to make substantive commitments.**

88. There is a strong correlation between female empowerment and child nutrition. If women are educated about nutrition and have decision-making power, food production within communities tends to be more varied and nutritious.²⁷⁷ Additionally, given the latest evidence on the causal relationship between maternal nutrition on the day of conception and subsequent stunting, there is a need to focus particularly on meeting the nutritional requirements of all women of childbearing age.²⁷⁸ **The importance of nutrition in the**

268 Ev w47

269 Ev w16

270 Ev 93

271 Ev 59

272 Ev 88

273 Ev 94

274 Ev 94

275 Ev 88

276 Q 79

277 Q 79

278 Q 81

1,000 day period between conception and a child's second birthday is well-recognised, but the latest evidence stresses the extent to which maternal nutrition on the day of conception influences the risk of her child suffering from stunting. Nutrition programmes should therefore focus on meeting the nutritional requirements of all women of childbearing age.

89. There are a number of major international initiatives to tackle undernutrition. Perhaps the most prominent is the Scaling Up Nutrition (SUN) initiative, which brings together governments, the private sector, academia, civil society organisations (CSOs) and the UN. Its aim is to support the development of country-owned strategies on undernutrition,²⁷⁹ with a focus on innovation and on the critical 1,000 day period between conception and a child's second birthday.²⁸⁰ Other important initiatives include Renewed Efforts to Address Child Hunger and Undernutrition (REACH).²⁸¹

90. DFID currently has bilateral nutrition programmes in 16 countries. We asked the Department whether it planned to increase its number of bilateral nutrition programmes; we were told that its future plans on nutrition would be announced at the 'Nutrition for Growth' event on 8 June 2013.²⁸² Asked whether he thought DFID had enough bilateral nutrition programmes, Marc van Ameringen, Executive Director of GAIN, said that it 'definitely' did not.²⁸³ Ertharin Cousin, Executive Director of WFP, argued that DFID could plausibly operate bilateral nutrition programmes in any country which has committed itself to fighting undernutrition (i.e. committed to the Scaling Up Nutrition initiative):²⁸⁴ currently 35 countries have done so.²⁸⁵ **At the 'Nutrition for Growth' event on 8 June 2013, DFID should launch additional bilateral nutrition programmes. The Executive Director of WFP suggested to us that DFID could operate bilateral nutrition programmes in any country which has committed to the Scaling Up Nutrition (SUN) initiative: we accept that this is unrealistic, since it would include a number of countries in which DFID has no bilateral presence. However in four SUN countries (Ghana, Kyrgyzstan, Rwanda and Sierra Leone), DFID has a bilateral presence but does not have a bilateral nutrition programme. In these countries, bilateral nutrition programmes should be launched., with a particular focus on nutrition during pregnancy and early years.**

Adaptation to extreme weather events

91. Extreme weather events are a major threat to the vulnerable. Climate change will exacerbate the situation.²⁸⁶ Dry areas will become dryer while wet areas will become wetter, leading to more droughts and more floods.²⁸⁷ Oxfam argues that extreme weather events

279 Q 79

280 Ev 89

281 Ev 89

282 Ev 107

283 Q 80

284 Q 80

285 "SUN Countries", Scaling Up Nutrition, scalingupnutrition.org

286 Ev 63

287 Ev w101

could cause short-term price increases equivalent to two decades' worth of gradual price increases.²⁸⁸ In view of this, it follows that climate change adaptation and disaster risk reduction are of the utmost importance. WFP emphasises that responses to extreme weather events should be proactive rather than reactive. It praises the UK Government for its work on this, and also praises the work of the Inter-Governmental Authority for Development (IGAD) Regional Disaster Resilience and Sustainability Platform during the 2011 famine in the Horn of Africa: under this platform, national governments focused on incorporating resilience into their national planning frameworks.²⁸⁹

92. There is widespread agreement that forecasting is crucial for disaster risk reduction: Geographic Information Systems can play a key role in this.²⁹⁰ Professor Tim Benton, of the University of Leeds, highlights the role of remote sensing in predicting yields, and the importance of using models that are able to heed such predictions. He also stresses the potential of improved long-term forecasts and of predicting and mapping levels of pest infestation.²⁹¹ **Climate change and disaster risk reduction are of the utmost importance for food security, and it is important that the UK maintain its current proactive approach to these matters. Forecasting tools such as remote sensing also have an important role to play.**

93. Forecasting is clearly of little use if actors are unable or unwilling to respond appropriately to forecasts. In the case of the 2011 famine in Somalia, forecasting was perfectly adequate.²⁹² In his evidence to us Daniel Gustafson, Deputy Director General (Operations) of FAO, recognised certain shortcomings in FAO's own advocacy work following the forecasts; he also argued that other institutions failed to act in response to forecasts. Ertharin Cousin, Executive Director of WFP, took a slightly different view, arguing that the central problem was the difficulty in gaining access to al-Shabbab-controlled areas, particularly for multilaterals and especially for WFP.²⁹³ **While forecasting is important in itself, ensuring adequate responses to forecasts is equally crucial, and this should be a priority for the international community. We recommend that DFID ensure appropriate accountability mechanisms are in place for triggering, escalating, recording and justifying responses to forecasts. The international response to the 2011 Somalia famine was inadequate. This was due to a variety of factors: we recognise the inherent difficulties in operating in insecure environments such as Somalia, but this does not absolve the international community entirely. We commend FAO for recognising certain shortcomings in its own advocacy work. More broadly, there is some disagreement as to whether agencies responded to forecasts as promptly as they should have done. DFID should press relevant actors to ensure that these allegations are fully investigated, with a view to minimising the risk of any such situation occurring in future.**

288 Ev 63

289 Ev 89-90

290 Ev 88

291 Ev w90

292 Q 100

293 Q 101

5 Conclusion

94. Progress against the MDG target to reduce the number of people suffering from hunger by half between 1990 and 2015 has been variable: while great strides have been made in East Asia and Latin America, the same cannot be said for South Asia, Western Asia and sub-Saharan Africa. As this report has shown, the fight against food insecurity has been made more difficult globally by a tightening of the balance between demand for and supply of food. On the demand side, policy-driven demand for biofuels and the consequent use of food crops for fuel is driving up food prices. The current rate of increase in meat consumption is unsustainable due to the large quantity of crops required to feed livestock. High levels of food waste pose an additional problem, and all this must be seen in the context of an increasing global population. On the supply side, farmers face a number of difficulties: the lack of good roads, irrigation and storage facilities leads to otherwise avoidable post-harvest losses in developing countries; insecurity of tenure prevents smallholders from investing in their land; and climate change poses a further challenge. In the context of these factors, global food prices have increased and become more volatile, and this situation is expected to persist. There have been various suggestions as to how such volatility might be mitigated, but the wisdom of some of these suggestions is dubious. While there may be a case for judicious use of stocks to reduce volatility, the imposition of export controls is thoroughly unhelpful. The challenge of preventing price spikes in future, and more broadly of ensuring that supply is able to meet demand, will not be easy.

95. However, as this report has shown, real progress is eminently achievable. There are a number of tangible measures which, if implemented, would have a significant impact on global food security. On the demand side, biofuels mandates should be reformed. Campaigns should be launched to reduce food waste in developed countries, while meat should be promoted as an occasional item rather than an everyday staple. On the supply side, donors should focus on creating an enabling environment for agricultural productivity in developing countries: this will include greater investment in infrastructure and land tenure projects. Smallholders have a vital role to play. They should be offered greater support through agricultural extension services, and should also be assisted to engage with large corporations. Climate change mitigation and adaptation should remain an overarching priority. Donors should focus on boosting the resilience of the most vulnerable to shocks and on protecting the poorest. Social protection is crucial, as is work to tackle undernutrition.

96. Our specific recommendations are repeated below. With some of the measures we propose, such as campaigns to reduce food waste, the impacts will by nature be gradual, becoming apparent only in the medium- to long-term. For other measures, however, the impacts will be immediate, the reform of biofuels mandates being the most obvious example. All that is needed is political will.

Conclusions and recommendations

Demand

1. Biofuels are driving higher and more volatile food prices and are having a major detrimental impact on food security. In some cases biofuels may be even more damaging to the environment than fossil fuels. We recommend that the Renewable Transport Fuel Obligation (RTFO), which commits the UK to consuming biofuel equivalent to 5% of transport fuel volumes, be revised to exclude agriculturally-produced biofuels. We recognise that the revision of the RTFO would make it more difficult for the UK to meet its EU target of deriving 10% of transport energy from renewable sources. However, the EU target does not apply until 2020. Consequently there is nothing to stop the UK from revising the RTFO now. (Paragraph 16)
2. In addition to revising RTFO, the UK must continue to push its European partners to revise the target under the Renewable Energy Directive (RED) which requires EU countries to derive 10% of their transport energy from renewable sources by 2020. This reform could include introducing Indirect Land Use Change (ILUC) factors into the RED, and imposing a cap on the level of food-based biofuel which can count towards the RED target. The introduction of ILUC factors and the imposition of a cap are not mutually exclusive options: both can be pursued concurrently. We recommend that the UK Government push for both, and that it push for the cap to be set at as low a level as possible. (Paragraph 17)
3. We were pleased to receive the Parliamentary Under-Secretary of State for International Development's assurance that biofuels would be discussed at the 'Nutrition for Growth' event. We also urge the Government to raise the issue at the G8 summit itself, and at the meeting of the EU Energy Council on 6 June. The Government should explain the outcome of these discussions to us in its response to this report. (Paragraph 18)
4. We welcome the Government's support for non-food-based biofuels. We recommend that the Government give particular support to the use of biofuels such as those derived from waste products, whose production does not require land. (Paragraph 20)
5. We recommend that the Government redouble its efforts to reduce the level of food waste in the UK. It should begin by taking on board the suggestions made in its own Foresight report on The Future of Food and Farming. For example, the Government should launch consumer campaigns to reduce waste and promote FareShare and similar schemes for unwanted food. The Government should also set targets for food waste reduction for producers and retailers and introduce sanctions for failure to meet the targets. (Paragraph 21)
6. The rate of increase in global meat consumption is unsustainable: the consequence is a growth in the production of grain-fed livestock, with crops used to feed livestock instead of humans. Clearly this does not mean that the world should stop consuming meat: this would be disproportionate and unrealistic. However, in the longer-term it

may be appropriate to focus on sustainable systems such as pasture-fed cattle rather than on grain-fed livestock, with meat promoted as a occasional product rather than an everyday staple. (Paragraph 22)

7. The global population continues to increase, and food production is expected to have to increase by 60-70% by 2050. In future population growth is expected to be concentrated amongst the poorest and least food secure countries; this will have implications for both chronic hunger and vulnerability to shocks. While detailed discussion of population-related policies is beyond the remit of this report, we urge DFID to maintain the strong focus on women's reproductive rights shown in last year's Family Planning Summit and maintain this sector as a priority for expenditure. (Paragraph 26)

Supply

8. Agricultural extension services play a critical role in improving smallholders' food security. In order to be sustainable, extension services should be funded from locally-generated revenue flows. DFID should devote a greater proportion of its budget to supporting the development of agricultural extension services, particularly those targeted at women. (Paragraph 30)
9. We recommend that DFID ensure that the agricultural extension workers whose work it supports address the issue of land degradation in their work. (Paragraph 31)
10. If we are to help smallholders to engage with large corporations, supporting the development of farmer organisations, including co-operatives, is vital. We recommend that DFID support the formation of farmer organisations, and seek to ensure that such organisations are fairly and transparently governed, with fair representation for women and marginalised farmers. (Paragraph 33)
11. The Africa Enterprise Challenge Fund (AECF), part-funded by DFID, has played a key role in helping smallholders to engage in corporate value chains. DFID should scale up its funding for initiatives such as AECF which help smallholders to engage with corporations. (Paragraph 34)
12. Smallholders should be provided with information on global markets. We welcome the Parliamentary Under-Secretary of State for International Development's acknowledgement of the potential of mobile technology; this can play a key role in providing access to market information to smallholders. (Paragraph 35)
13. We support the recommendations of the Fairtrade Foundation: companies which purchase crops from smallholders should contract to offer payment in regular instalments throughout the year, rather than simply paying at harvest time, and companies should also consider contracting to pay smallholders in advance. (Paragraph 36)
14. Offering smallholders a guaranteed price for their crop encourages them to invest in their farms, but price guarantees offered by the public sector are often problematic. Price guarantees offered by private companies are preferable. We recommend that

DFID encourage more of its private sector partners to offer guaranteed prices to smallholders, or to guarantee to buy a certain quota of crop. (Paragraph 37)

15. Both small- and large-scale farms have a role to play in feeding a growing population sustainably and in reducing rural poverty. For most countries a mixture of the two will be most appropriate. Determining the precise balance between small-scale and large-scale farms is a matter for each individual country: it is not our place to lecture developing countries about how their agricultural sectors should be structured. In some cases, a shift towards somewhat larger farms is likely to increase food production and improve the efficiency of the agricultural sector. However, in many cases, smallholders will retain a key role. In all cases, the generation of employment and the productive use of land will be paramount. (Paragraph 40)
16. We welcome the G8's focus on transparency. We recommend that the Government require UK-domiciled corporations to be transparent about land deals, and that it use its influence to ensure that the World Bank meets adequate standards of transparency and consultation in its own investments. (Paragraph 41)
17. Implementation of the UN Voluntary Guidelines on the Governance of Tenure would help to mitigate current concerns about commercial land acquisitions. We welcome the Government's support for the Voluntary Guidelines, and were pleased to be told by the Parliamentary Under-Secretary of State for International Development that the issue would be discussed during the forthcoming G8 summit. We ask the Government to explain the outcome of these discussions to us in its response to this report. (Paragraph 42)
18. Work to establish land registers which improve smallholders' security of tenure, such as that conducted by DFID in Rwanda, has a dual benefit: it enables smallholders to invest in their land while also providing them with greater security against so-called 'land grabs'. We welcome the news that DFID is designing a similar programme in Ethiopia, and we suggest that it consider launching additional projects of this nature elsewhere. (Paragraph 43)
19. We warmly welcome the discovery of large-scale groundwater reserves in Africa by the British Geological Survey. In the long-term, this discovery may have major benefits for food security. DFID should support the development of scientific knowledge and capacity in these areas. For example, DFID could support an increase in the number of climate stations, and the training of hydrogeologists. (Paragraph 46)
20. Improving rural infrastructure would have a dramatic effect on food security. Across much of the developing world, inadequate roads and storage facilities lead to large-scale post-harvest crop losses. Particularly in Africa, a lack of irrigation undermines agricultural productivity. DFID should give a higher priority to these issues. (Paragraph 49)
21. We recognise that genetically modified organisms (GMOs) are controversial and clearly not a panacea. However, it could be argued that GMOs have the potential to make a valuable contribution to food security. DFID should ensure that any support it gives is beneficial to the poorest and most food insecure, and that any

commercialisation or extension of GM seeds to smallholder farmers does not undermine their ability to save and store traditional seed varieties. (Paragraph 54)

22. Agricultural research has a key role to play in ensuring food security. We support the recommendation of the Food Ethics Council: DFID should make agricultural research a high priority. We welcome the Government's current work on this, and we urge DFID and DEFRA to ensure that their work in this area is joined-up. Progress in agricultural research will have benefits in the UK as well as in developing countries. (Paragraph 56)
23. We welcome the Government's pledge to provide £1.8 billion of funding to tackle climate change over the next two years. Making detailed recommendations as to how this money should be spent is beyond the remit of this report; however, it is crucial that the Government sticks to its pledge. The Government should also work with its international partners to ensure that the commitments made at the Copenhagen conference are met. (Paragraph 58)
24. While much discussion focuses on the implications of climate change for agricultural productivity, DFID should not lose sight of the fact that agriculture can in fact make a valuable contribution to climate change mitigation. Agroforestry, for example, can help to improve carbon sequestration. Where appropriate DFID should support models of agricultural production that have the potential to contribute to emissions reductions. (Paragraph 59)
25. For farmers, improving levels of resilience to climate change is vital. DFID should help farmers to boost their resilience through techniques such as crop diversification, insurance, improved land management, more appropriate planting dates, and the use of more resilient crop varieties. (Paragraph 60)

Recent shocks and their impact

26. We recognise that maintaining large-scale food stocks can sometimes be problematic and costly. However, given the increasing volatility of food prices over recent years, we believe there may be a case for judicious use of stocks to relieve the tightness of markets. We recommend that the Government conduct further research into this. Specifically, the Government should consider under what circumstances it would be appropriate for a national government to pursue strategic stockholding for national food security purposes. It should consider what the costs, risks and benefits of this strategy would be, and what capacities would be required. (Paragraph 69)
27. The launch of the Agricultural Market Information System (AMIS) is a major step forward in the fight against food price volatility. We commend all participant countries for supporting this initiative, but we recognise that its long-term success will depend upon the quality of information provided by participant countries. (Paragraph 71)
28. The introduction of export controls by certain countries was regrettable, and served to make an already bad situation worse. The decision by the G20 to remove any export bans for food purchased by the World Food Programme is a welcome step in the right direction, but more needs to be done. The UK should encourage its

international partners to remove any remaining export bans and to dissuade them from introducing any new ones. It should also commit to raising this issue at the forthcoming G8 summit. (Paragraph 72)

Speculation

29. Evidence as to the impact of speculation on food prices is inconclusive. While there has been a proliferation of recent research on this topic, there is still no consensus. We recommend that the Government study the latest research in detail, and that it use this research to inform its future policy on this issue. (Paragraph 74)

Social Protection

30. When shocks occur, social protection plays a vital role in protecting the food security of the poorest. In 14 of the 29 countries in which it has bilateral programmes DFID does not currently plan to fund social protection. We ask the Department to explain the thinking behind this. (Paragraph 79)

Humanitarian Assistance

31. Where emergency interventions are needed to protect food security, cash- and voucher-based schemes are preferable to in-kind food aid provided markets are accessible and functioning. Where appropriate, we recommend that DFID and its partner organisations favour cash- and voucher-based schemes over in-kind food aid. (Paragraph 80)
32. WFP's 'Purchase for Progress' scheme has a double benefit: it supports WFP's humanitarian work while also supporting local economies in developing countries. We were pleased that the Parliamentary Under-Secretary of State agreed to consider scaling up DFID's support, and we reiterate our belief that this would be a wise thing for DFID to do. (Paragraph 81)
33. Given that urban food insecurity is increasingly common, we urge DFID to think give more consideration to how it provides social protection in urban areas. Cash- and voucher-based schemes are especially important in urban settings. (Paragraph 82)

Emergency food stocks

34. The maintenance of food stocks for humanitarian purposes is of critical importance. These stocks should be managed by individual countries, as this gives the countries concerned greater ownership of the policy. Stocks should be stored on a decentralised basis. We recognise that some countries may lack the capacity to store and manage stocks satisfactorily; in these cases, we recommend that DFID support capacity building. (Paragraph 83)

Nutrition

35. Undernutrition affects over 30% of the world's population, and 26% of all the world's children suffer from stunting. We find this quite shocking and wholly unacceptable. Undernutrition has long-term health implications; more broadly, it also represents a barrier to development. Combating the scourge of undernutrition should be a top priority for the international community. We welcome the forthcoming 'Nutrition for Growth' event, and urge participants in the event to make substantive commitments. (Paragraph 87)
36. The importance of nutrition in the 1,000 day period between conception and a child's second birthday is well-recognised, but the latest evidence stresses the extent to which maternal nutrition on the day of conception influences the risk of her child suffering from stunting. Nutrition programmes should therefore focus on meeting the nutritional requirements of all women of childbearing age. (Paragraph 88)
37. At the 'Nutrition for Growth' event on 8 June 2013, DFID should launch additional bilateral nutrition programmes. The Executive Director of WFP suggested to us that DFID could operate bilateral nutrition programmes in any country which has committed to the Scaling Up Nutrition (SUN) initiative: we accept that this is unrealistic, since it would include a number of countries in which DFID has no bilateral presence. However in four SUN countries (Ghana, Kyrgyzstan, Rwanda and Sierra Leone), DFID has a bilateral presence but does not have a bilateral nutrition programme. In these countries, bilateral nutrition programmes should be launched, with a particular focus on nutrition during pregnancy and early years. (Paragraph 90)

Adaptation to extreme weather events

38. Climate change and disaster risk reduction are of the utmost importance for food security, and it is important that the UK maintain its current proactive approach to these matters. Forecasting tools such as remote sensing also have an important role to play. (Paragraph 92)
39. While forecasting is important in itself, ensuring adequate responses to forecasts is equally crucial, and this should be a priority for the international community. We recommend that DFID ensure appropriate accountability mechanisms are in place for triggering, escalating, recording and justifying responses to forecasts. The international response to the 2011 Somalia famine was inadequate. This was due to a variety of factors: we recognise the inherent difficulties in operating in insecure environments such as Somalia, but this does not absolve the international community entirely. We commend FAO for recognising certain shortcomings in its own advocacy work. More broadly, there is some disagreement as to whether agencies responded to forecasts as promptly as they should have done. DFID should press relevant actors to ensure that these allegations are fully investigated, with a view to minimising the risk of any such situation occurring in future. (Paragraph 93)

Formal Minutes

Tuesday 21 May 2013

Members present:

Sir Malcolm Bruce, in the Chair

Fiona Bruce	Jeremy Lefroy
Richard Burden	Fiona O'Donnell
Fabian Hamilton	Chris White
Pauline Latham	

Draft Report (*Global Food Security*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 96 read and agreed to.

Annex and Summary agreed to.

Resolved, That the Report be the First Report of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

Written evidence was ordered to be reported to the House for printing with the Report (in addition to that ordered to be reported for publishing on 9, 17 January, 12, 19, 26 March, 18 April and 9 May 2013.

[Adjourned till Tuesday 4 June at 9.30 am

**

Witnesses

Tuesday 5 February 2013

Page

Max Lawson, Head of Advocacy and Public Policy, Oxfam, **David McNair**, Head of Growth, Equity and Livelihoods, Save the Children, and **Patrick Mulvany**, Co-Chair, UK Food Group

Ev 1

Tim Lang, Professor of Food Policy, City University, London, **Camilla Toulmin**, Director, International Institute for Environment and Development, and **Andrew Dorward**, Professor of Development Economics, School of Oriental and African Studies

Ev 12

Tuesday 26 March 2013

Ertharin Cousin, Executive Director, UN World Food Programme, **Dan Gustafson**, Deputy Director General (Operations), Food and Agriculture Organisation of the UN, and **Marc Van Ameringen**, Executive Director, Global Alliance for Improved Nutrition

Ev 21

Sir John Beddington, Government Chief Scientific Adviser, Government Office for Science, **Kanayo Nwanze**, President, International Fund for Agriculture Development, and **Dr Shenggen Fan**, Director General, International Food Policy Research Institute

Ev 29

Thursday 18 April 2013

Norman Baker MP, Parliamentary Under-Secretary of State, Department for Transport

Ev 37

Lynne Featherstone MP, Parliamentary Under-Secretary of State, Department for International Development, **Professor Tim Wheeler**, Deputy Chief Scientific Adviser, Department for International Development and **Dr Kenny Dick**, Team Leader, Food and Nutrition Security, Department for International Development

Ev 39

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List of printed written evidence

1	The Global Alliance for Improved Nutrition (GAIN)	Ev 55
2	Dr Shenggen Fan, International Food Policy Research Institute (IFPRI)	Ev 58
3	Oxfam GB	Ev 62: Ev 66
4	Professor Andrew Dorward, School of Oriental and African Studies	Ev 67
5	UK Food Group	Ev 72: Ev 80
6	World Food Programme	Ev 83: Ev 90
7	Sir John Beddington, Government Chief Scientific Adviser	Ev 91
8	Department for International Development	Ev 98: Ev 107

List of additional written evidence

(published in Volume II on the Committee's website www.parliament.uk/indcom)

1	ActionAid	Ev w1: Ev w115
2	Agricultural Biotechnology Council	Ev w8
3	All-Party Group on Agriculture and Food for Development	Ev w11
4	BBC Media Action	Ev w14
5	Benny Dembitzer	Ev w16
6	Christian Aid	Ev w20
7	Concern Worldwide	Ev w24
8	The Co-operative Group	Ev w28
9	The Fairtrade Foundation	Ev w32
10	Farm Africa and Self Help Africa	Ev w36
11	Food Ethics Council	Ev w39
12	Friends of the Earth	Ev w42
13	The Hunger Alliance	Ev w47
14	Institute of Development Studies	Ev w48: Ev w113
15	Mercy Corps	Ev w50
16	OECD	Ev w54
17	The Planetary Boundaries Initiative (PBI)	Ev w59
18	Research Councils UK (RCUK)	Ev w62
19	SABMiller	Ev w68
20	Small Foundation	Ev w72
21	The Soil Association	Ev w74
22	War on Want	Ev w76
23	Tearfund	Ev w80
24	United Nations High Commissioner for Human Rights	Ev w84
25	Professor Tim Benton, University of Leeds	Ev w88
26	The Vegan Society	Ev w92
27	WaterAid	Ev w96
28	Wellcome Trust	Ev w97

29	World Vision	Ev w98
30	WWF-UK	Ev w99
31	Business Action for Africa	Ev w106
32	ONE	Ev w110

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List of Reports from the Committee during the current Parliament

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2012–13

First Report	DFID's contribution to the Global Fund to Fight AIDS, Tuberculosis and Malaria	HC 126 (609)
Second Report	Scrutiny of Arms Exports (2012): UK Strategic Export Controls Annual Report 2010, Quarterly Reports for July to December 2010 and January to September 2011, The Government's Review of arms exports to the Middle East and North Africa, and wider arms control issues	HC 419 (CM 8441)
Third Report	The Development Situation in Malawi	HC 118 (641)
Fourth Report	Tax in Developing Countries: Increasing Resources for Development	HC 130 (708)
Fifth Report	DFID's programme in Zambia	HC 119 (759)
Sixth Report	Afghanistan: Development progress and prospects after 2014	HC 403 (862)
Seventh Report	UK Aid to Rwanda	HC 726 (949)
Eighth Report	Post-2015 Development Goals	HC 657 (1065)
Ninth Report	Department for International Development's Annual Report and Accounts 2011–12	HC 751(1098)
Tenth Report	Pakistan	HC 725

Session 2010–12

First Report	Appointment of the Chief Commissioner of the Independent Commission for Aid Impact	HC 551
Second Report	The 2010 Millennium Development Goals Review Summit	HC 534 (HC 959)
Third Report	Department For International Development Annual Report & Resource Accounts 2009–10	HC 605 (1043)
Fourth Report	The World Bank	HC 999 (1044)
Fifth Report	The Future of CDC	HC 607 (1045)
Sixth Report	Scrutiny of Arms Export Controls (2011): UK Strategic Export Controls Annual Report 2009, Quarterly Reports for 2010, licensing policy and review of export control legislation	HC 686 (CM 8079)
Seventh Report	The Humanitarian Response to the Pakistan Floods	HC 615 (1435)
Eighth Report	The Future of DFID's Programme in India	HC 616 (1486)

Ninth Report	DFID's Role in Building Infrastructure in Developing Countries	HC 848 (1721)
Tenth Report	The Closure of DFID's Bilateral Aid Programme in Burundi	HC 1134 (1730)
Eleventh Report	Financial Crime and Development	HC 847 (1859)
Twelfth Report	Working Effectively in Fragile and Conflict-Affected States: DRC and Rwanda	HC 1133 (1872)
Thirteenth Report	Private Foundations	HC1557 (1916)
Fourteenth Report	Department for International Development Annual Report and Resource Accounts 2010-11 and Business Plan 2011-15	HC 1569 (107)
Fifteenth Report	South Sudan: Prospects for Peace and Development	HC 1570 (426)
Sixteenth Report	EU Development Assistance	HC 1680 (427)

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