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Seeking solutions to the global crisis in food and agriculture

“All Party Parliamentary Group on Agriculture and Food for Development Inquiry:

Meeting the Millennium Development Goals (MDGs)

UK Food Group submission

The UK Food Group is making this brief submission to inform the current Inquiry of the All Party Parliamentary Group (APPG) on Agriculture and Food for Development. It is especially relevant to four of the eight questions posed in the call for evidence. This submission summarises many of the views expressed in recent papers, processes and conferences of the UK Food Group but may not represent all the views of each member of the network, several of whom have submitted their own contributions. The evidence for and references to many of the statements in this submission can be found the UK Food Group Briefing “Securing Future Food”, copies of which will be made available to the committee. Additional sources include the recent publication “Africa’s smallholder farmers: approaches that work for viable livelihoods” of the African Smallholder Farmers Group, most of whom are members of the UK Food Group. Other sources from UK Food Group members are listed at the end of this paper. In addition further evidence is cited in footnotes.

Summary:

This submission provides some of the evidence that we believe will help the APPG Inquiry in its deliberations. We anticipate that the Inquiry may wish to consider the points raised and in its conclusions urge relevant government ministries to:

- Respond positively to the call of the organisations of small-scale food providers (smallholder farmers, herders, artisanal fishers and others), especially women, for realising food sovereignty and for the necessary radical changes in the policy measures, research and extension systems and practices that drive environmentally, and animal welfare, damaging industrial food systems; develop democratic and inclusive research systems and collaborative and community-based extension; and implement the findings of IAASTD. This will necessitate, *inter alia*, ‘changing the rules’ on intellectual property and monopoly control of the food system.
- Ensure UK policy, in line with the new EU policy on food security, is driven by the need to fulfil the Right to Food; and that it should support and promote food sovereignty; increase democratic control over localised food systems, and reduce the vulnerability of small-scale food providers and consumers to speculative activity on global financial markets.
- Promote a shift to localised, climate-resilient, biodiverse and ecological food production in the framework of food sovereignty, that is more productive, and will both mitigate climate change and help small-scale food providers better adapt to more extreme weather events; and reject large-scale ‘false solutions’, especially those driven by the carbon market.
- Give priority in global governance to the role of the multilateral and inclusive Committee on World Food Security, monitoring impacts especially in terms of: achieving more sustainable and ecologically-based food provision; and the extent of inclusion in food and agricultural development processes of the representatives of small-scale food providers and their proposals for realising food sovereignty.

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The UK Food Group

The UK Food Group is the principal civil society network in the UK on global food and farming issues and is the UK focal point for many European and International networks. It represents BOND (British Overseas NGOs in Development) on these issues especially in CONCORD's European Food Security Group, which interfaces with the EU, especially DG Development.

The UK Food Group:

- facilitates communications between UK NGOs;
- organises conferences – the most recent in September 2010 was “Securing Future Food” (see www.ukfg.org.uk/Securing_future_food.php);
- prepares occasional Briefings (see www.ukfg.org.uk/ukfg-resources.php);
- works with European NGOs and African regional farmers' networks in lobbies of EU and UN institutions (see www.europafrika.info); and
- is the UK focal point for various international networks, including the More and Better network (see www.moreandbetter.org).

Members of the UK Food Group include both large and smaller NGOs, including farmer-centred NGOs, that work on development and environment issues related to food and farming internationally. Most members work directly or indirectly with small-scale food producing communities in the global South. For more information, see www.ukfg.org.uk.

Introduction

Agriculture is the lifeblood of the majority of the rural population of the world. More than half a billion Africans in sub-Saharan Africa, for example, or some 65 per cent of the population (and more than 80 per cent in some countries), depend on smallholder agriculture as their primary source of livelihood. Women farmers are the primary providers of food for more than 80% of the whole population. Their food production systems have proved remarkably resilient despite multiple threats. However, these threats have led to many rural peoples being poor and marginalised and at times underfed: up to fifty percent of the world's hungry are in rural households including those of marginalised farmers.

The reasons for marginalisation, poverty and hunger are complex and various including: limited, secure access to sufficient fertile land, water, farmers' diverse seeds and local livestock breeds; and insufficient on-farm or municipal storage facilities and a compulsion to sell more than surplus at harvest, at unpredictable farm prices, leading to the need to buy back later at higher costs. What is clear, as Oliver De Schutter, the UN Special Rapporteur on the Right to Food said at the UK Food Group Conference in September 2010, is that they have partial food security and a disadvantaged position in society and the economy.¹ Furthermore, at that meeting, De Schutter said the only long term way to resolve the crisis would be to shift to agroecological ways of growing food. This form of food production, which does not depend on fossil fuels, pesticides or heavy machinery, has been shown to protect soils and use less water.²

It makes sense, therefore, to help small-scale food producers to secure their access to resources needed and to build on and protect their small-scale production systems. These are more environmentally sustainable. This would appear more appropriate, rather than to conceive, on their behalf, some theoretical existence outside small-scale food production with no remaining stake in anything except their own poorly rewarded labour.

The challenge for the UK government is how the emerging international consensus for more aid, investment and political support for agriculture can be redirected to realise the right to food for all, rooted in climate resilient localised, biodiverse and ecological food systems that protect the resources, environment, livestock health and well-being, production capacity and markets of small-scale producers. In this frame, ODA for agriculture should be increased to and sustained at 10% of ODA.

What is the role of Agriculture and Food Security both within the MDGs and beyond?

The two Millennium Development Goals (MDGs) that are of greatest importance for agriculture and which most affect agriculture are: MDG 1: Eradicate extreme poverty and hunger (including: halve hunger by 2015); MDG 7: Ensure environmental sustainability (including: reverse the loss of natural resources, especially biodiversity).

Clearly the first approach to improving the nutrition of small-scale farmers should be through facilitating their local food production. Others such as the rural poor, including landless rural labourers, and the urban poor, are often largely dependent on these food producers through extensive rural and urban food webs.

UK Food Group, representing BOND in the CONCORD European Food Security Group (EFSG), contributed to the submission to the European Union on MDG 1, in preparation for the MDG review summit in September 2010.³ We urged the EU to adopt a rights based approach using the FAO voluntary guidelines on the right to food. This is to ensure that the right to food, nutrition policy and protection of local food production drives EU agriculture and

¹ Olivier De Schutter, UN Rapporteur on the Right to Food, UK Food Group Conference, 'Securing Future Food' 24 September 2010

² See www.guardian.co.uk/environment/2010/sep/24/food-crisis-un-emergency-meeting-rome

³ Towards the UN MDG Review Summit 2010: Recommendations to the EU. CONCORD/BOND, March 2010

food security policy. We proposed that planned increases in EU spending must be dedicated to long term programmes and investments that benefit poor farmers, including women producers and the most food insecure people. These recommendations are of course valid for UK policy as well.

Subsequently, the new EU policy framework on food security was agreed.⁴ This will assist developing countries in addressing agriculture and food security challenges. It should enhance small-scale sustainable production which provides food, especially for local consumers. It supports low external input agroecological approaches of women and men small-scale producers, which improve climate resilience and productivity at lower costs to food producers. This is in line with the findings of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD)⁵, cited in this new EU policy.

This approach will also help preserve biodiversity, as called for by MDG 7, and will favour the conservation and development of agricultural biodiversity on-farm and in pastures, forests and fisheries. Watersheds, biodiversity, wildlife habitat, forest and landscape are hugely affected by those who occupy and use the land. Small-scale food producers therefore can contribute to sustaining the environment, developing its biodiversity and promoting the welfare of farm animals, and can use their own long standing skill and knowledge to limit or reverse any damage at a small-scale that can be restored. In contrast, large-scale industrial commodity production does macro damage to the environment, soils, livestock welfare and fisheries that is much more difficult to reverse.

What impact will climate change have upon agriculture and food security and how should donors adapt to this pressure?

Climate change is recognised as the most serious environmental challenge facing agriculture and the food system. Food production is fundamentally dependent on the weather and climate change is set to increase uncertainties and stresses, which could have significant negative effects on agricultural output, especially in tropical zones, and the state of fisheries. The Intergovernmental Panel on Climate Change says yields from rain-fed farming in some African countries could fall by up to 50% by 2020, and by up to 30% in some central and South Asian countries by 2050.⁶ Climate change will also bring extensive loss of fertile agricultural land owing to sea level rise.

It is worth recalling that agriculture is the only sector in the economy that has the potential to appear on either side of the carbon equation: industrial food systems currently contribute excessively to greenhouse gas emissions but lower input and more ecological production for local markets could hugely reduce this carbon footprint and potentially sequester carbon.

MITIGATION

Industrial agriculture, livestock and fisheries, geared to globalised 'free' markets, are a major contributor to greenhouse gas emissions. Through the inputs they consume, land conversion, production methods and globalised commodity trading they are estimated to contribute 30 per cent to human-produced greenhouse gases, more if transport, processing retailing and waste disposal are included. Government should resist calls for intensifying chemical fertiliser and pesticide use, which will contribute to more greenhouse gas

⁴ Communication from the Commission to the Council and the European Parliament An EU policy framework to assist developing countries in addressing food security challenges SEC(2010)379/COM/2010/0127 final/
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0127:FIN:EN:PDF>

⁵ For more on IAASTD, co-sponsored by the World Bank and the UN, which was the first global scientific and peer reviewed assessment of agriculture, see the outputs from the UK Food Group conference "Agriculture at a Crossroads: Implementing the findings of the international agriculture assessment - IAASTD" www.ukfg.org.uk/agriculture_at_crossroads.php

⁶ IPCC (2008) *Intergovernmental panel on climate change fourth assessment report*, Geneva: IPCC

emissions, and reject large-scale 'false' solutions, especially those driven by the carbon market. These potentially dangerous 'solutions' include 'geoengineering' the planet's life support systems. A shift to the widespread use of more ecological, biodiverse, local food production systems, with a focus on building soil health and fertility, would help mitigate against climate change.

The FAO says low input sustainable agriculture has huge potential to sequester carbon dioxide from the atmosphere by increasing the organic content in soils, and it says organic agriculture can reduce green house gas emissions because it requires 25-50% less energy compared to conventional chemical-based agriculture.⁷

Suggestions have been made that livestock emissions can be reduced by changing the diets of animals or by altering their genetic make-up. These mitigation measures should have an Animal Health and Welfare Impact Assessment before they are accepted for government or donor-driven support and should incorporate only humane and sustainable animal farming methods.

ADAPTATION – INCREASING RESILIENCE

It is a general rule that the more diverse an agroecosystem, the better able it is to withstand environmental stress and shocks. This resilience allows it to be more productive across a range of environmental conditions. As confirmed by IAASTD, ecological production systems, especially at smaller-scales, can be more diverse, resilient and productive per unit area or unit of water and improve biodiversity. Increasing agricultural biodiversity of integrated crops and livestock (and aquatic organisms, where appropriate) and related ecosystem functions will improve the ability of food producers to maintain or increase the resilience of their production to climate change. These ecological production methods also allow communities to use what they already have in a sustainable manner. They are more affordable to poor people, as they are not premised on purchased inputs but on local resources and knowledge.

At the same time, community-based adaptation will need intensive support from the climate science community – small-scale farmers, herders and fishers in Africa, Asia and Latin America should be their priority client. Therefore existing meteorology capacity, knowledge institutes and universities as well as new initiatives, such as the WMO Global Framework for Climate Services, need to ensure that the poorest in the most vulnerable sector benefits.

What is it that small holder farmers and developing nations want from DFID and the UK? How can small holder farmers participate in, and help define, an agricultural agenda that is more in accordance with their needs?

Before the "G8" summit in 2009, African farmers said: *"The tens of millions of agricultural producers organized in the five regional networks of farmers' organizations of Africa (EAFF, PROPAC, ROPPA, SACAU, UMAGRI) and united in the African Platform of Farmers' Organizations are well aware that the world is undergoing crucial moments of its ecological, economic and social history..... Structural adjustment policies, the Bretton Woods financial institutions and multinational corporations have not improved the way of life of rural people in Africa. What is more, the present system of liberalization and globalization accentuates poverty in our countries and creates food dependency."*⁸

Therefore, in so far as governments accede to the system of liberalisation and globalisation, their relations with poorer and numerous food producers will be handicapped along with the ability of these producers to lead local responses to securing food supplies.

⁷ Niggli, U et al (2009) *Low Greenhouse gas agriculture, mitigation and adaption potential of sustainable farming systems*, Rome FAO

⁸ The Farmers' Organizations of Africa address the G8, April 2009

The way in which organised bodies of small-scale farmers see the future is largely encompassed in the food sovereignty framework⁹ developed by Via Campesina in 1996 and now the dominant policy option of most small-scale farmers social movements, as well as pastoralists, fishers and others who support them across the world. It is their countervailing policy to the system of liberalisation and globalisation of the food system. It is only through food sovereignty, using the knowledge, skills and technologies of these small-scale food providers, especially women who provide much of the world's food, that we will achieve a resilient food system. Food sovereignty has been written about extensively and is summarised in our previous submissions to the APPG as well as in the UK Food Group briefing "Securing Future Food".

With regard to livestock production, the UK should promote only humane systems which support small-scale producers, while protecting the environment and protecting the health and welfare of the farm animals themselves.

The question that small-scale food producers are asking is will the UK and other governments as well as international donor institutions advocate for improved support and protection of small-scale food producers, their resilient food production methods and their local markets? And to secure future food will governments make the best land, water and resources primarily available for smaller-scale, more ecological production of healthy food, rather than for producing industrial commodities, livestock feed and biofuels / agrofuels?

Equally, a question for the UK and donor community and its institutions and governments is whether they will ensure that industrial food systems are radically changed, and that trade favours smaller scale producers and speculation in food is prevented? Will they 'change the rules' on intellectual property and the monopoly control of agribusinesses, which allow these corporations to concentrate power over resources, technologies, trade and retail? Will they allow governments to protect local food production and consumption systems from debilitating cheap imports, imposed technologies and inappropriate models of production and consumption? In sum, will they support the realisation of food sovereignty?

We urge the Inquiry to ensure it admits evidence from representatives of small-scale food producers' social movements which are seeking to realise food sovereignty. The UK Food Group will do what it can to bring relevant sources of information to the attention of the APPG.

Research and extension

As other members of the UK Food Group, such as IIED, have highlighted in their submissions to the APPG Inquiry, there is a need for opening up agriculture and food production policy processes to more diverse forms of knowledge. They also a need to embrace participatory decision-making approaches in policy-making processes and agenda setting for research and development of agricultural science and technology. Where more participatory methods have been used, as our members have witnessed in many parts of the world, they have been demonstrated to be more appropriate and effective.

Rural extension - the ways of sharing knowledge - needs to address women and other small-scale producers' real needs and problems and they should have the opportunity to influence its direction and priorities, its processes and outcomes. Women receive only 7% of extension services and their needs often go unmet. It is also unhelpful if extension arises primarily from an external commercial operation intent on selling things.

Millions of small scale farmers, pastoralists and fishers do not have access to appropriate extension services. Work with resource poor producers by UK Food Group members over many decades has shown a different more sustainable route to securing food supplies from

⁹ Michael Windfuhr and Jennie Jonsén (2005) *Food Sovereignty: towards democracy in localized food systems*. http://practicalaction.org/print/docs/advocacy/foodsovereignty_fian.pdf

the conventional government extension package. The challenge has been to design advisory systems catering to an approach that improves technologies for sustainable management of land, water and biodiversity resources and which puts local communities in control. These devolved community level extension services can be self sustaining and stimulate government extension services to work more effectively. They add local, peer-to-peer advice and services to those that small-scale producers might, or should, receive from government.¹⁰

Community based-extensionists are practicing small-scale farmers, livestock keepers or fishers selected by their community and trained to a standard where they can offer credible advice and services in a specific area of production. They are able to advise on how to manage local natural resources using techniques that can be adapted from local knowledge through experiments by the small-scale producers themselves, using different combinations of existing local and new knowledge. Producers who are accustomed to expecting that useful knowledge is only in the hands of visiting professionals sometimes have to be convinced that they can gain something similar, let alone better, from a fellow community member. These devolved extension systems strengthen locally relevant innovation processes, adaptive capacity and resilience, thereby offering policy makers a powerful tool for economic and social development through improving small-scale food provision.

All that has gone before argues for a partnership based on mutual respect between governments and farmers. Good advisory work can develop people's capacity and understanding as well as knowledge. More than that, good advisory workers can learn much from the experience and knowledge of the people they work with and can spread knowledge thus acquired to others. Also, extension work with a community development emphasis can bring smallholder farmers together to share among themselves and encourage and enable each other to improve local sustainable food production. In addition, the advisors' experience of the farming reality and of the people can be passed "upwards" to influence policy and its application.¹¹

Strengthening small-scale producer to producer exchanges of knowledge and practices can have long-lasting impacts. The UK could support these sustainable and enduring processes by strengthening community capacities for locally-based extension. This will also help communities to draw more effectively on any limited public services that may exist.

In addition, the agricultural research agenda needs to be fundamentally reoriented to support farmer-led community-based organisations and participatory on-farm research. Small-scale farmers, herders and fishers should not be passive recipients of the outputs of formal research, much of which has successfully avoided or failed to work on issues relevant to them. It must be relevant to and managed by these small-scale food providers.

What form should the UK's international engagement in agriculture and food security take; and how should the effectiveness of UK interventions be measured?

We urge the APPG to recommend that the UK looks to, and fully supports, the UN-based governance of food and agriculture through the reformed Committee on World Food Security (CFS). It has the most inclusive mechanism for incorporating the views of small-scale food producers through its newly approved 'Civil Society Mechanism'. The UK should work to strengthen the CFS which is an inclusive and democratic space in which to determine and realize better governance of the food system. The UK should also, based on the principles embodied in the CFS, commit to using its influence to make real changes in trade

¹⁰ See, for example, Collett K & C. Gale (2009) *Training for rural development: agricultural and enterprise skills for women smallholders*, City & Guilds Centre for Skills Development, London
<http://t4rd.skillsdevelopment.org/PDF/Review%20of%20Practice.pdf>

¹¹ See "Bridging the Gap", Agricultural Christian Fellowship, 2010.

(commerce and agreements), aid, finance/speculation, and regulation – in favour of people and the environment.

The UK government should encourage a national reduction in the consumption of animal products from industrial livestock production and promote this policy to other high-consuming nations with whom it partners in the EU, the G20 and the Commonwealth. It is particularly important that transition countries, notably China, India and Brazil, where industrial animal agriculture is growing fastest, are aware of the future harms which this model can bring to their land, their population and their livestock.

The UK government should acknowledge the concerns raised by the UN Special Rapporteur on the Right to Food about the harmful impacts of financial speculation on commodity markets to food price volatility and food security. It should support proposals both in the European Union and at the G20 for greater transparency in commodity derivatives markets, as well as for strict limits to financial institutions participation in these markets¹².

For monitoring the effectiveness of UK interventions, a priority is to assess the degree to which policy and practice has shifted towards ecological and smaller-scale food production in the framework of food sovereignty. In addition, we support, among others, the criteria provided in the 2005 DFID paper “Growth and poverty reduction; the Role of Agriculture” (para. 137) which provided useful guidance. This included monitoring the extent to which policy and practice: ensures the participation of representatives of the rural poor in shaping agricultural policies; strengthens and, if appropriate, reforms public sector institutions so they can deliver important functions which support agricultural development; and ensures that agricultural development strategies provide incentives for the sustainable use of natural resources and environmental services.

Conclusions

This submission provides some of the evidence that we believe will help the APPG Inquiry in its deliberations. We anticipate that the Inquiry may wish to consider the points raised and in its conclusions urge relevant government ministries to:

- Respond positively to the call of the organisations of small-scale food providers (smallholder farmers, herders, artisanal fishers and others), especially women, for realising food sovereignty and for the necessary radical changes in the policy measures, research and extension systems and practices that drive environmentally, and animal welfare, damaging industrial food systems; develop democratic and inclusive research systems and collaborative and community-based extension; and implement the findings of IAASTD. This will necessitate, *inter alia*, ‘changing the rules’ on intellectual property and monopoly control of the food system.
- Ensure UK policy, in line with the new EU policy on food security, is driven by the need to fulfil the Right to Food; and that it should support and promote food sovereignty; increase democratic control over localised food systems, and reduce the vulnerability of small-scale food providers and consumers to speculative activity on global financial markets.
- Promote a shift to localised, climate-resilient, biodiverse and ecological food production in the framework of food sovereignty, that is more productive, and will both mitigate climate change and help small-scale food providers better adapt to more extreme weather events; and reject large-scale ‘false solutions’, especially those driven by the carbon market.
- Give priority in global governance to the role of the multilateral and inclusive Committee on World Food Security, monitoring impacts especially in terms of: achieving more sustainable and ecologically-based food provision; and the extent of inclusion in food and agricultural development processes of the representatives of small-scale food providers and their proposals for realising food sovereignty.

¹² See: “Food Commodities Speculation and Food Price Crises: regulation to reduce the risks to price volatility.” Oliver De Schutter, Briefing Note 2, September 2010.
www.srfood.org/index.php/en/component/content/article/1-latest-news/894-food-commodities-speculation-and-food-price-crises

References

Below are listed a selection of relevant publications by the UK Food Group and its members.

UK Food Group briefing (2010) *Securing Future Food: towards ecological food provision*. This briefing shows that in order to secure future food, it requires policies and practices that are aimed at both *environmental sustainability* goals, especially in the context of climate change, and *social sustainability* and *development* goals. It shows that the systems which currently feed most people in the world – smaller-scale, locally-sourced – can be enhanced through *ecological food provision* to meet current and future global demands for food, and more reliably so than industrial production, if support, research and trade policies were reoriented in its favour. It identifies key actions that need to be taken to set food provision and the food system in this direction. It presents the commitments of the small-scale food providers themselves in their endeavours to realise food sovereignty.
www.ukfg.org.uk/Securing_future_food.pdf.

Africa Smallholder Farmers Group (2010) *Africa's smallholder farmers: approaches that work for viable livelihoods*. This report summarises several effective approaches that have been facilitated by members of the group. It calls on government to: 1) Commit to increase the relative and total amount of aid targeted at the needs of vulnerable farmers in Africa, to compensate for past under-investment and to take account of the additional costs of climate change adaptation; 2) Focus agriculture aid allocations and policy dialogue in Africa on: a. safeguarding the natural resources on which vulnerable farmers depend through increased funding for soil and water conservation; b. integrating climate risk analysis, participatory disaster risk reduction approaches and adaptation strategies into all agricultural programming; c. promoting innovative approaches, systems and institutions to scale up and diffuse existing sustainable technologies and farmer innovation. d. delivering agricultural marketing services and innovations that enable vulnerable farmers to link their produce to local markets; e. encouraging research projects that include vulnerable farmers in the development of drought-resistant cropping systems and livestock breeds; f. facilitating self-mobilisation by local farming communities, especially in remote regions; 3) Provide support for agriculture across all DFID country programmes; 4) Pursue a sector-based approach to agriculture for development; 5) Encourage a joined-up response to the challenge; and 6) Effectively influence international aid policy. <http://practicalaction.org/docs/ia1/asfg-africa-smallholder-farmers.pdf>

Action Aid (2010) *HungerFREE scorecard 2010*: Who's really fighting hunger? Why the world is going backwards on the UN goal to halve hunger and what can be done. It argues the world is going backwards on achieving MDG1 and calls for massively scaled up spending on sustainable agriculture, the implementation the IAASTD recommendations, the elimination of EU and US biofuels targets, and the strengthening of the Committee on World Food Security.
www.actionaid.org/assets/pdf/ActionAid-scorecard-report-2010.pdf

Agricultural Christian Fellowship (2010) *An Unsafe Distance* This is an examination of farmer/government relations. The first chapter traces the deterioration of these relations in the UK. Chapter two and three deduces the reasons for this and links it with the work of DFID and the last two chapters discuss ways forward, both in UK and in DFID's area of concern.
www.agriculture-theology.org.uk/wp-content/uploads/Reflections.pdf

BOND / CONCORD (2010) *Towards the UN MDG Review Summit 2010: Recommendations to the EU*. This paper, compiled by the CONCORD network of 1,600 European Development NGOs, sets out what civil society believes the European Union needs to deliver in order to achieve progress towards meeting the MDGs. It also includes specific recommendations for the UN Review Summit.
www.bond.org.uk/data/files/MDG_2010/bond_mdgs_full.pdf

Christian Aid (2009), *Community Answers to Climate Chaos: Getting Climate Justice from the UNFCCC*, demonstrates that poor communities including smallholder farmers and herders are not just victims of climate change, but can be a significant part of the international solution. Community action can build the resilience and stability of countries and their economies in response to ongoing changes in the climate. Through local sustainable development, working to improve and conserve the natural environment they live in, communities can improve food security and the livelihoods of millions of vulnerable people. www.christianaid.org.uk/images/community-answers-to-climate-chaos.pdf

Compassion in World Farming and Friends of the Earth (2009) *Eating the Planet*. Written by leading Austrian and German scientists, this report shows that it is possible for everyone in the world to have a nutritious and balanced food intake if we abandon the industrial livestock model, with a reduction in meat and dairy consumption in those societies with high consumption levels, and with the support of policy makers for humane and sustainable farming systems. www.ciwf.org/eatingtheplanet

Compassion in World Farming (2009) *Beyond Factory Farming: Solutions for animals, people and the planet*, outlines the challenges facing the world in producing enough food to feed the world in

2050 and presents the environmental, human health and animal welfare related evidence of why we need to end factory farming. The report presents evidence of the benefits of humane livestock production systems and responsible meat consumption to the environment, climate change mitigation and to human health. www.ciwf.org/beyondfactoryfarming

Find your Feet, Self-Help Africa, Farm Africa and others (2009) *Climate Frontline: African Communities Adapting to Survive*. In this paper, African women and men describe, in their own words, how climate change is affecting their lives and how they are adapting to survive. These communities are not only living with climate change, they are implementing strategies in order to adapt to the changing conditions. Governments and international bodies should recognise that these communities have experiences that can help reduce negative impacts of climate change. www.climatefrontlineafrica.org

IIED (2010) *Democratising agricultural research for food sovereignty in West Africa*. This multimedia book reports on an initiative in West Africa that seeks to create safe spaces in which food providers and consumers can discuss how to build an agri-food research system that is democratic and accountable to wider society. An explicit aim of the entire process is to strengthen the voices and effectiveness of small-scale producers and other citizens in the governance of agricultural research as well as in setting strategic research priorities and validating knowledge. www.iied.org/pubs/pdfs/14603IIED.pdf

IIED (2010) *Values, Systems and Sustainability*. This book paints a vivid picture of an alternative future: sustainable and fair systems for the provision of food, energy, fibre and textiles, housing and water that are environmentally benign and involve positive interventions in natural cycles. While their environmental impacts are negligible, non-existent or positive, their socio-economic benefits are multiple and significant. www.iied.org/pubs/pdfs/G02780.pdf

Practical Action (2009) *Biodiverse Agriculture for a Changing Climate*. This paper, a summary of some issues in *Understanding Climate Change Adaptation*, explores biodiverse agriculture as a realistic and proven alternative to industrial methods of production. Practised by millions of small-scale food producers and organic growers, biodiverse agriculture can limit and adjust to climate change while replenishing the natural resources on which food production depends. http://practicalaction.org/advocacy/biodiverse_agriculture_paper

Progressio (2009) *Fertile Ground: Why urgent funding and support for small-scale farmers in poor countries will help prevent global food crises*. This report states that for centuries small-scale farmers have provided a food security buffer against outside shocks, supplying poor communities with local food at local prices. By growing produce in harmony with the environment - or 'agroecologically' - farmers are able to better protect their land and crops from erratic weather linked to climate change. It calls for urgent action by governments and policy-makers to ensure these practices continue. www.progressio.org.uk/files/98468/FileName/Fertile_Ground_16nov2009.pdf

Send a Cow (2008) *Preparing to climate proof: the next challenge for Africa's rural poor*. This paper tackles one of the biggest challenges facing governments and aid agencies today – and asks what it means to 'climate proof' Africa's rural poor. It investigates what constitutes an environmentally sound programme – and identifies what can be done to move grass roots action closer to protecting small-scale farmers from the vagaries of climate change. www.sendacow.org.uk/assets/files/Related-downloads/Preparing_to_Climate_Proof.pdf

The World Development Movement (2010) *The Great Hunger Lottery: how banking speculation causes food crises*. Banks, hedge funds and pension funds are betting on food prices in the financial markets, causing drastic price swings in staple foods such as wheat, maize and soy. This report explores the recent financialisation of food commodity markets, and how this phenomenon has contributed to drastic increases in the volatility of food prices, as well as contributing to sudden price shocks, such as in 2007-2008. It looks at the impacts of financial speculation on hunger, examines the regulatory structures that had prevented such crises in the past, and explores the political opportunities for reintroducing effective controls in the immediate future. www.wdm.org.uk/food-speculation/great-hunger-lottery

War on Want (2009) *Food Justice*. For over a billion people across the developing world, farming is a way of life, providing food, income and a sense of community rooted in generations of tradition. Yet in recent years this way of life has come under attack. Unfair trade rules and the rise of corporate farming have displaced whole communities and pushed millions of people into poverty and hunger. As food prices continue to escalate and the global recession cuts deeper into the real economy, the plight of small-scale farmers is set to grow worse. www.waronwant.org/resources/publications/doc_download/65-up-front-food-justice