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PARLIAMENTARY BRIEFING

House of Lords debate on food security

21 May 2012

Summary

- **The concept of ‘food security’ must incorporate sustainability and natural resources that are the foundation of food production, which are currently overexploited and unsustainable.**
- **The global food system causes huge environmental degradation and accounts for one of the most pervasive human impacts on the planet’s ecosystems. It must be brought within planetary boundaries while providing nutritious food fairly to a growing population. This is the defining challenge of the 21st century.**
- **The Foresight Report has warned of a ‘perfect storm’ of competition for food, water and energy by 2030. Policymakers must not treat these in isolation.**
- **There are varying estimates of the need to increase food production to feed a global population of 8 or 9 billion people, but it is likely the vast majority of any increase must occur through sustainable smallholder agriculture in developing countries. It is not the developed world’s role to ‘feed the world’.**
- **Projected population increases coupled with unsustainable levels of food consumption are extremely worrying. Global food security requires policies to promote sustainable consumption patterns as a matter of urgency.**
- **Rising demand for livestock products is not inevitable and presents a major threat to global food security and sustainability. Policies should promote less resource-intensive diets (which are also healthier) and equitable distribution.**
- **Government policy domestically and internationally is behind the curve on addressing food security and sustainability. The UK must develop a comprehensive cross-department food strategy and action plan.**



President: His Royal Highness,
The Prince of Wales KG, KT, GCB, OM
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Chief Executive: David Nussbaum

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Food security

WWF welcomes global efforts to reduce food insecurity in developing countries and among the poorest. It is a scandal that 1 billion people are suffering from malnutrition and hunger while this same food system has led to 1.5 billion overweight or obese people worldwide. Food production is responsible for around 30% of global greenhouse gas emissions, uses 70% of freshwater, 60% of land, and is the major driver of deforestation and biodiversity loss. Overall food contributes nearly a 25% of our ecological footprint. These facts demand a re-assessment of the global food system to include sustainability and equity, and for the government to develop a comprehensive cross-departmental food strategy. Global solutions must bring the food system within planetary boundaries and put sustainability and food security on equal footing.

Food sustainability: water, energy, climate

The landmark UK Foresight report, *Food and Farming Futures*, made a compelling case for urgent reform of the global food system in the face of a ‘perfect storm’ of competition for food, water and energy. These interconnected aspects could exacerbate one another. It is clear that global food security will require integrated policy-making and forward-planning at UK and global levels.

Producing food sustainably is as important to the future of the world as producing energy sustainably. It requires better managed inputs to fields, better stewardship of soils and water, more equitable distribution of foodstuffs, a drive to reduce excessive consumption, and a major effort to eliminate waste everywhere – from fields and warehouses, to dinner plates.

Global food security depends on better sustainable water management practices especially in developing countries. Reliable, safe and sufficient water is vital for food production. Agriculture uses approximately 70% of global water supplies, and global water use for agriculture has increased substantially. The land area under formal irrigation has increased 21 per cent in 20 years.¹ Irrigation now accounts for 70 per cent of the water abstracted from rivers and underground reserves; and if rainfall is taken into account, crops are responsible for 92 per cent of the human water footprint. Globally, we are hugely wasteful in our use of both water and fertilizers. Most fertilizer never gets into the crops and instead pollutes rivers and marine waters, or is released from soils into the atmosphere as nitrous oxide, a potent greenhouse gas. Demand for fresh water is projected to increase by 30% by 2030.

Food is a major contributor to anthropogenic climate change, both as a direct source of emissions and as a driver of land-use change and deforestation. Livestock farming is responsible for 18 per cent of the world’s greenhouse gas emissions and leads to a range of direct and indirect environmental stresses.² The food system is responsible for some 30% of the UK’s carbon footprint, a significant proportion of which is from imports. The UK farming industry is taking some steps to improve efficiencies and reduce emissions, but this does nothing to address the impacts of the 60% of food imported every year. As the recent inquiry into Consumption-based Emissions noted, the government should use this data to

Any strategy to address long-term global food security must address climate change mitigation and adaptation. The world is currently on course for 3.5-6 degrees average warming, which would cause *inter alia* a dramatic rise in global food insecurity, 40% decrease in global food production, major water stress and harvest variability. As a first step, the UK should ensure all its overseas aid is ‘climate-smart’ and increase its share of climate finance to developing countries.

¹ UNEP. 2011. Keeping Track of Our Changing Environment: From Rio to Rio+20. Nairobi., Kenya.

² For example see FAO. 2006. Livestock’s long shadow; Murphy Bokern. 2008. An assessment of environmental impacts of UK food consumption. WWF UK.

Food production

There is ongoing dispute over whether food security in 2050 will require substantial increases in food production, with some suggesting 70% or more. (FAO recently downgraded its 70% figure.³) High estimates rely on assumptions about the widespread uptake of ‘Western’ diets high in meat, dairy and processed food and low in fresh fruit and vegetables, and no efforts to reduce the 40% of food grown that is wasted. FAO suggests an upper limit of 60% which it says would be unachievable without major rehabilitation of degraded ecosystem services, improved stewardship of natural resources, and effective regulation and incentives.

This and similar figures are often cited as a reason to increase food production in the UK and EU ‘to feed the world’. However, the UN and FAO are clear that any production increase should occur almost exclusively in sustainable smallholder agriculture in developing countries. WWF regrets that some stakeholders misuse the term ‘food security’ to justify for policies and practices that do not contribute to global food security. The UK government and other stakeholders should cease citing the 70% figure, use greater caution when discussing increases in food production, and ensure the term ‘food security’ is clearly defined and used with integrity. To ensure coherent government policy beyond DfID – a major funder of smallholder agriculture – the UK should develop a cross-departmental food strategy and adjust its own ambitions to increase domestic production.

Food consumption and sustainable diets

Current trends suggest an increasing uptake of a ‘Western’ diet high in livestock products, wild and farmed fish, and energy-intensive processed foods. Average meat consumption worldwide had risen from 34 kilograms per year in 1992 to 43 kilograms today.⁴ WWF notes that these trends are unsustainable and cause for concern. The UK government should not encourage the spread of Western foods and eating habits to new and emerging markets without due consideration of the economic, environmental, cultural and health consequences.

Prof. John Beddington s noted that to ensure a sustainable food system we must ‘reshape food access and consumption patterns to ensure basic nutritional needs are met and to foster healthy and sustainable eating patterns worldwide.’⁵ To keep within UK carbon budgets, the Committee on Climate Change has recommended more ambitious policies on consumer behaviour change, waste reduction and ‘diet rebalancing’ away from resource-intensive foods. The Government has shown few signs of interest in this area so far. The first step must be to define a ‘sustainable diets’, defined by the FAO as ‘those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. [They] are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources.’⁶

WWF’s ‘Livewell Plate’ is an example of a UK sustainable diet that is compatible with government healthy eating advice and would also meet UK GHG targets. See www.wwf.org.uk/livewell WWF recommends that DEFRA and the Department of Health cooperate to define a ‘sustainable diet’, incorporate sustainability criteria into healthy eating advice, and explore behaviour change policies to ‘rebalance’ the average UK diet in the long-term.

³ FAO. The Economist Conference: Feeding the World in 2050, Geneva, Switzerland, 8 February 2012.

⁴ UNEP. 2011.

⁵ Beddington J, et al. 2011. Achieving food security in the face of climate change. CGIAR Research Program (CCAFS). Copenhagen, Denmark.

⁶ <http://www.fao.org/ag/humannutrition/biodiversity/en/>

UK government role

Above all, the UK government needs a coherent, cross-department, long-term strategy and action plan that incorporates food security, sustainability, equity and hunger. This should be referenced to climate change, water management, fisheries, and health. A major blind-spot remains addressing unsustainable food consumption and its consequences. The objection that ‘it is not our role to tell people what to eat’ is an inadequate response to the challenges of ensuring food security for the UK and the world.

WWF awaits with interest the forthcoming Green Food Project – a high-level ministerial advisory group examining how to enhance the environment while increasing food production in England which reports in July. The Government must use this opportunity to set out a credible timetable for the development of its food strategy and action plan that includes health, sustainability, equity, consumption and production.

The UK should adopt and promote the recommendations the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) which were ratified in 2008.

The Rio+20 Conference in June provides opportunities to advance the global agenda on food security and sustainability. For further details please see WWF’s briefing on food and sustainable agriculture at Rio+20 available at wwf.org.uk/parliamentary

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1961-2012: 50 years of conservation. WWF works in over a hundred countries to protect the natural world, tackle climate change and promote sustainable consumption.

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