



Government
Office for

Science

 Foresight



The Future of Food and Farming:

Challenges and choices for global sustainability

ACTION PLAN

The Future of Food and Farming: Challenges and choices for Global Sustainability

Foresight launched the ***Future of Food and Farming: Challenges and choices for Global Sustainability (FFF)*** report on 24 January 2011.

Interested parties in UK Government and more widely have contributed their expertise to the process of developing and analysing the evidence. Furthermore, many of these organisations have indicated that they will use the findings to inform their work in a variety of ways. This Action Plan sets out some of these activities. Although it is in no way intended to represent an exhaustive list, it does, nevertheless, give a flavour of the considerable breadth and depth of interest in the Report and of its potential impact.

Progress against these and other activities linked to the Report will be reviewed by the project's minister-led, High-level Stakeholder Group in early 2012 - the Project's 'One Year Review'.

The Foresight Programme in the UK Government Office for Science is under the direction of the HM Government Chief Scientific Adviser. Foresight helps government think systematically about the future.

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Organisation	Action
<p>Department for Environment, Food and Rural Affairs</p> <p>and</p> <p>Department for International Development</p>	<p>As the Report's sponsoring departments, Defra and DfID recognise the importance of taking urgent action to address the current shortcomings of the food system – hunger and significant environmental degradation – and ensure we're prepared for the challenges the food system faces out to 2050, including rising demand for food, the impacts of climate change and increased competition for water and energy.</p> <p>Defra and DfID will be jointly acting on the report's findings and will strongly encourage others to do the same, as it is clear that concerted efforts at national, regional and global levels of government, and close partnership with the private sector and civil society, are crucial to address the challenges we face today and in the future.</p> <p>In immediate response to the report,</p> <p>Defra will:</p> <ul style="list-style-type: none"> ● Champion a more integrated approach by governments and international institutions to global food security that makes the links with climate change, poverty, biodiversity, energy and other policies. ● Continue to press for full integration of agricultural GHGs into UNFCCC process; take forward Nagoya work on international biodiversity; and promote the importance of sustainable intensification of agriculture more broadly. ● Continue to press for reform of the CAP and CFP so that they are better focused on long-term environmental sustainability and avoid harmful subsidies; support the EU as it seeks to negotiate a genuinely pro-poor conclusion to the Doha Development Round which includes a significant opening of agricultural markets; and plan an active role in talks in the G20, FAO and elsewhere aimed at finding ways of managing volatility. ● Showcase what can be achieved on food waste reduction within the UK, working with other countries and multinational companies to share and disseminate good practice. ● Work in partnership with our whole food chain including consumers to ensure the UK leads the way on sustainable intensification of agriculture, increasing the productivity and competitiveness of

UK farming and food chain while reducing GHG emissions, protecting and enhancing the natural environment, using resources more sustainably, so that agriculture and the food sector can contribute fully to the green economy.

and **DfID** will:

- support the work of the G20 to improve global food security and mitigate the impact of food price volatility on poor people in developing countries;
- promote a more effective to global food security by national governments and international organisations, based on a strengthened evidence base that makes the links with climate change, poverty, biodiversity, energy and other policies;
- Strengthen international public policy by conducting a series of systematic reviews of evidence linking agriculture, economic growth, hunger and nutrition; and
- Develop a joined up approach to addressing nutrition which includes health and agriculture inputs and which is based on strengthened evidence. This will include continued investment in the development of bio-fortified crops, crops which have higher levels of essential micro-nutrients.

DfID will continue to support Increasing agriculture growth rates in the face of resource scarcity by addressing the yield gap and developing new technology. Annual agriculture productivity is increased contributing to faster economic growth and poverty reduction. This will include:

- Investing in the development of new agriculture products (crop and livestock varieties, farming systems) which will be more resilient to climate change, less dependent on external inputs and more productive. This will lead to Increased productivity of major cereals such as rice, wheat and maize to sustainably meet the food needs of growing populations, through better pest, drought and flood resistance and tolerance to salinity, by integrating research in molecular biology, plant breeding; and
- Improved institutional arrangements to develop and adapt innovations that improve incentives, to assess and improve competitiveness of the poor, and to improve input and output markets suited to small-scale agricultural production.

And also;

	<ul style="list-style-type: none"> • Continue to support intentional efforts to increase domestic investment in agriculture and food security in Africa. We will support the implementation of the AU Comprehensive African Agriculture Development Programmes; and • Improve evidence and understanding of agricultural systems in diverse and vulnerable systems which leads to interventions to reduce vulnerability to shocks and trends for smallholders both men and women.
UN High Level Task Force on Global Food Security	<p>The UN HLTF welcomes the publication of the Foresight report on the Future of Food and Farming. It anticipates the UN system organizations which work together in the UN Secretary General’s High Level Task Force on Global Food Security will draw on its evidence and analyses of challenges and choices for Global Sustainability as they pursue the policy options outlined in their Updated Comprehensive Framework for Action. The UN HLTF appreciates the breadth and depth of analysis and the care with which conclusions have been drawn. The report helps readers to appreciate the complex interplay between food systems, human nutrition, the environment and changing climates and ways in which these relationships can be expected to evolve over time. UN HLTF anticipates that the findings of the report will be drawn in within many national and regional fora where food security issues are analyzed with a view to improving the prospects for the hundreds of millions of hungry people in our world.</p>
Organization for Economic Cooperation and Economic Development	<p>The Foresight report is a major contribution to identifying the decisions that policy makers need to take today to ensure that an increasing global population can be fed sustainably and equitably. It is extremely timely, given the big challenges that policy makers face, including the recent volatility in agricultural commodity markets – which were the focus of the meeting of Ministers of Agriculture in the OECD in 2010.</p> <p>The report is in line with OECD findings, emphasizing the serious consequences of inaction – business as usual – in terms of meeting future food demand, resource depletion and environmental degradation. But well functioning and open global markets - taking account of environmental and social concerns – and harnessing innovation and technology, offer grounds for optimism that the challenges can be met.</p> <p>The report has brought together many experts from a wide variety of disciplines and countries across the world,</p>

	<p>including insights and analysis from colleagues in the OECD. The key findings will assist in the development of the OECD's Green Growth Strategy for Food and Agriculture, the OECD Agriculture Knowledge Systems Conference in June 2011, as well as the OECD's work with African countries on agriculture in Spring 2011.</p>
World Bank	<p>The challenges of feeding the world to 2050 will be enormous, particularly given the new challenges arising from climate change. Knowing what to do, and how to do it, is particularly difficult given the complexity of the systems involved and the limited attention given to this issue during the long period of cheap and abundant food. This Foresight report has made a major contribution to meeting these challenges by organizing the information that was currently available, and by commissioning an array of valuable scientific and economic studies to address the gaps in our knowledge. Both the project's final report and the array of underlying studies will be enormously valuable in guiding the World Bank's research and thinking meeting these challenges. The Agriculture and Rural Development Research unit looks forward to welcoming project team to present key findings at a World Bank seminar, and is confident that the report will have a substantial impact on thinking about food and farming issues within the World Bank.</p>
Biotechnology and Biological Sciences Research Council	<p>The Foresight report has been already been influential within BBSRC, helping inform the development of its strategic plan for 2010 to 2015 in which food security is one of three strategic research priorities. Also, the BBSRC is leading the development of the UK's Global Food Security research partnership and the study has contributed to the evolution of its Strategic Plan -2011 to 2016.</p> <p>BBSRC expects that the Foresight report will contribute in a number of ways to the development of its own thinking as it implements the Council's new Strategic Plan and associated Delivery Plan;.</p> <p>Finally, BBSRC will explore the scope for either the BBSRC or the wider GFS partnership to work with Foresight to consider in more detail some of the "Top 100 questions of importance to the future of global agriculture" - <i>International Journal of Agricultural Sustainability</i></p>
National Farmers' Union	<p>The future of British agriculture and horticulture is intimately linked with food and farming globally, and the challenges of climate change, volatility, resource depletion</p>

	<p>and population growth. The NFU sees considerable opportunities for British farmers in the coming decades, alongside the clear need to be more productive at the same time as providing environmental benefits. The importance of scientific research and development, new technologies and practices, knowledge exchange, and effective supply chains must not be under-estimated.</p> <p>The fact that the Foresight report was developed through independent and rigorous analysis and backed by high-level global stakeholders is valuable. We hope it will help us in articulating our messages about the critical role of British agriculture in securing food supplies for the long term, and the forward-looking policies that are essential in achieving this. We expect the report to provide a sound evidence base for our policy development in these areas, informing our speeches, articles, publications and discussions with key decision makers and opinion formers. We look forward to working with the Foresight team to enable the report to have maximum impact nationally, in Europe and around the world.</p>
OXFAM	<p>The CEO, Barbara Stocking will use the report at the World Economic Forum at the end of January.</p> <p>Oxfam International will also use the report during: the Spring 2011 Meetings; the launch of our own campaign on Food Justice in a Resource-Constrained World campaign in May (please note this is a working title); the COP Interessionals and Commission Food Security and the G8/G20 in June; and the EU dialogue this year on the European Development Consensus.</p>
Institut National de la Recherche Agronomique	<p>INRA and CIRAD will work with Foresight to review key components of, and potential synergies between, INRA's Agrimonde report and the UK Foresight study and to explore the scope for future joint activity.</p>
Bill and Melinda Gates Foundation	<p>The timing of the Foresight report is very good for the Bill and Melinda Gates Foundation, as it is currently renewing its own Agriculture Strategy and it will be one of the expert reports which the team will be able to draw in during that strategy process.</p>
World Economic Forum	<p>The World Economic Forum will continue strengthening commitment and collaboration at the global level to make the New Vision for Agriculture a reality. In that context, the World Economic Forum looks forward to working with Foresight to identify and raise awareness around new approaches and launch new partnerships. In particular,</p>

we are keen to better engage the private and public sectors to work together to develop a global agricultural system that feeds the world, protects our planet and creates prosperity.

All the reports and papers produced by the Foresight Project on Global Food and Farming Futures may be downloaded from the Foresight website (<http://www.bis.gov.uk/Foresight>).
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