The Cambridge Forum for Sustainability and the Environment

Meeting 6: 10th March 2015 in Downing College



Aims

The aim of our topic this year is to draw connections between food security, biodiversity and bioenergy and to use the meetings to think about the research pathways that will help us to prepare for and address the challenges we will face in the future.

This is the sixth meeting in the series. This month, our theme is 'From global to local' and we will explore questions that focus on the impacts of changes in land use, climate change and the demand for resources at a range of scales.

Agenda

All the witnesses will give a 10 minute introduction and their perspective on the two core questions followed a general discussion:

5:00pm Welcome by the Chair and an introduction to the topic

Each witness gives a short introduction and thoughts about the questions (10 mins)

Questions and beginning the open discussion

6:00pm Coffee break

Continue the discussion in three groups and then come together for final thoughts

7:15pm Reception and dinner, which will include a working session

Witnesses

This month, the two witnesses are:

Dr Toby Gardner	Research Fellow at the Stockholm Environment Institute, Sweden
Dame Barbara Stocking	President of Murray Edwards College, University of Cambridge
Professor Tim Wheeler	Deputy Chief Scientific Adviser at the Department for International Development and Professor of Crop Science at the University of Reading

Questions

The witnesses have all been asked two core questions:

- 1) What do you perceive as being the main gaps in our knowledge?
- 2) What would you include in the 'next generation' of research questions?

Each of these questions will be posed to everyone and their answers will then be used as a springboard for further discussion. The main points raised will then sent to everyone to use as a starting point for the next meeting.



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Witness profiles

Dr Toby Gardner

Research Fellow at the Stockholm Environment Institute, Sweden

Toby Gardner joined the Stockholm Environment Institute in January 2014 as a Research Fellow funded by the Swedish Research Council, Formas. His primary focus is on transitions towards more sustainable land-use systems in Brazil.

Toby has over 10 years' experience in science and science-policy issues in human-modified landscapes across the tropics, with a strong emphasis on the management and conservation of biodiversity and ecosystem services in multiple-use agriculture-forestry landscapes, and the challenges of balancing environmental concerns and rural development priorities.

Before joining the Institute Toby was a research fellow at the University of Cambridge for five years, and helped found and coordinate the Sustainable Amazon Network. He is an affiliated researcher at the Goeldi Museum in Belém (Pará) and the International Institute for Sustainability (Rio de Janeiro). He has previously led research projects in Belize, Tanzania, and in Caribbean coral reef ecosystems.

He has authored more than 80 peer-reviewed publications, including a reference book on the monitoring and management of biodiversity in forest ecosystems (Earthscan, 2010). In 2012 he was awarded the biannual British Ecological Society's Founders' Prize for significant contributions to the science of ecology.

Dame Barbara Stocking

President of Murray Edwards College, University of Cambridge

Dame Barbara Stocking became the 5th President of Murray Edwards College, founded as New Hall, in July 2014.

Prior to taking up her post at Murray Edwards College, Barbara was Chief Executive of Oxfam GB from May 2001 until February 2013. During this time she led major humanitarian responses including the Horn of Africa and the West Africa food crises, as well as the Haiti earthquake, Pakistan floods, and Tsunami. On campaigning, Barbara led Oxfam's work on Make Poverty History, and more recently their work on climate change and the current Grow campaign on food justice in a resource constrained world. Barbara regularly spoke at major global meetings; for example at the UN, in New York and Rome, and at the World Economic Forum in Davos.

Previously a member of the top management team of the National Health Service, in her eight years with the NHS Barbara worked as regional director for the South East of England, and then as the founding Director of the NHS Modernisation Agency. Barbara has a Masters degree in physiology, and has broad experience of healthcare systems, policy and practice, including periods at the National Academy of Sciences in the USA and with the World Health Organisation in West Africa. She was awarded a CBE for health services in 2000 and a DBE for humanitarian services in 2008, and was elected an Honorary Fellow of Murray Edwards College in 2010.

Professor Tim Wheeler

Deputy Chief Scientific Adviser at the Department for International Development and Professor of Crop Science at the University of Reading

Tim Wheeler is Deputy Chief Scientific Adviser at the DFID and he is on secondment from the University of Reading. At DFID, Tim provides science advice to Ministers and oversees the research portfolio of the Research and Evidence Division. He has extensive experience of working with policy-makers in the UK and internationally and was Specialist Adviser to the House of Lords in 2010.

Tim has published more than 170 scientific papers over the last 20 years on how climate change could impact on the sustainability of agriculture and food, undertaking research in Bolivia, Honduras, The Gambia, Uganda, China, India and elsewhere. His research group identified how temperature extremes reduce annual crop yields under climate change, developed novel ways of modelling climate change impacts on crops at a global scale and produced the first crop model to be coded within a global climate model to allow the study of land-surface-climate interactions over croplands.

He has provided advice on the sustainability of food and farming to agri-businesses and food multinationals, often up to Board level. In 2005 he delivered a Royal Society Public Lecture titled 'Growing Crops in changing climate' and co-authored a Royal Society Statement on Climate Change and Agriculture tabled at the G8 Summit in Gleneagles.

