



Speakers Biographies & Abstract

Sustainable Agriculture

Dr Les Firbank

Head of North Wyke, Institute of Grassland and Environmental Research

Biography

Les studies the inter-relationships between farming and biodiversity. His early work looked at competition between weeds and crops, before looking at broader scale impacts of agricultural management on birds, mammals, plants and invertebrates. These studies addressed organic farming, set-aside, Countryside Stewardship, culminating in his leadership of the Farm Scale Evaluations of GM Crops. He is now Head of North Wyke, a research station in Devon that addresses the interactions between different environmental and production aspects of grassland-dominated farming systems. He was a member of the Defra Sustainable Food and Farming Research Priorities Board and is a co-ordinating lead author of the forthcoming International Assessment of Agricultural Science and Technology for Development.

Abstract

Recent thinking in European agriculture has focussed on delivering environment benefits at a time of ample food. However, commodity prices are rising rapidly in response to increasing global food markets, reduced harvest and the diversion of foodstuffs to biofuels. Our expectation from the land is also increasing; we want it to provide not only food, but energy, housing, flood protection, water supply, biodiversity, beautiful landscapes, etc. We need agricultures that promote production alongside enhanced social and environmental benefit. While there is no single solution to “sustainable agriculture”, some changes in policy and practice are likely to prove more sustainable than others.

Sustainability of the food supply chain

Professor Peter J Lillford CBE

Director, The National Non-Food Crop Centre (NNFCC)

Biography

Peter was trained as a chemist at King's College London, and after postdoctoral positions at Cornell and the San Francisco Medical Centre, joined Unilever Research where he spent most of his career. He led Basic Research in Food Physical Chemistry and Materials Science and as Chief Scientist (Foods), was also responsible for research in Microbiology and Sensory Science. He retired in 2001 and is currently a Visiting Professor in the Biology Dept. of the University of York., and the School of Engineering in Birmingham. He is Chairman of Governors of the Institute of Food Research (UK), and is Chairman of the UK LINK Scheme in Advanced Food Manufacturing, he currently holds a Flagship Fellowship in CSIRO (Australia), and consults for several multinational food companies.

He was Chairman of the UK Technology Foresight Programme for Food and Drinks and is also a former President of IFST (UK).

Abstract

Most of the activities in the Food Chain can be traced back over many centuries. However, the modern world has developed:- High on-farm yields International commodity trading Large scale continuous processing Sophisticated preservation methods and Global distribution of finished products All this has been achieved with advances in Science and Technology, but also with the assumption that the Earth performs as a limitless energy supply and waste disposal sink. Now our assumptions are changing. For example the public is aware that:- Pollution is significant, climate change is occurring , and fossil fuel energy sources may be finite.

As a result of these Key Drivers, the Food Chain is aware of, and shares, the need to reduce energy and water use, and by-product waste. These are seen as opportunities to reduce costs, but consumers raise issues less comfortably dealt with, such as:- Farming inputs should use less chemicals Foods should not have chemicals added Processed foods are unhealthy Food Miles are a demonstration of environmental damage Waste is the fault of the Food Chain etc. We will examine the facts in more detail, and the response in the UK.

Whilst each "player" in the Food Chain, will attempt to optimise their own organisation, there is a need to explore new scenarios because there will not be a single global solution.

Exploitation of food waste, technological and economic drivers

Peter Jones

Director External Relations, BIFFA

Biography

Peter T Jones is a Director of Biffa Waste Services Limited with specific responsibilities in external affairs and strategy development. He has 18 years experience in the waste industry - all with Biffa - before which he has worked in the welding, pallet hire, parcels and industrial gases sectors. He is a member of the Chartered Institutes of Marketing, Transport, and Wastes Management, and operates in roles demanding specific skills in the development and management of change processes in sectors undergoing substantial upheaval due to competitive, regulatory, or other pressures. He qualified from Nottingham University as an industrial economist in 1969, and in July 2007 received an honorary degree from the University of Southampton.

As chair of the now disbanded RSA Environment Committee, Peter now takes a lead in championing the RSA Traded Carbon Credits Scheme.

In the environmental arena Peter is chair of the DEFRA/DTI Resource Efficiency KTN which he carried on from the chairmanship of the Mini-Waste Faraday. He also sits on the DEFRA New Technologies Demonstrator Programme, their Data Advisory Panel, and the Sustainable Consumption and Production Taskforce (for which he chairs a subcommittee looking at the issues around distributed energy systems in the UK). He has also given evidence to a range of Parliamentary Select Committees over the years on the subjects of waste, sustainability, resource efficiency, and other issues relating to future environmental challenges faced by society.

In the charitable sector, Peter is a Trustee of Waste Watch and Global Action Plan, as well as being on the Advisory Committee of the Resource Recovery Forum, and a member of the WWF-UK Council of Ambassadors. When the rules permitted, he was instrumental in the creation of the Biffaward Mass Balance Programme which resulted in over £10m of funding to over 60 sectoral, material, and regionally focused studies designed to inform policy development in the environmental debate. He is a keen advocate of the case for considering the waste sector as an important catalyst to unlocking the issues around the carbon economy in a UK context.

Abstract

Peter Jones will provide an update on the end life resource Sector view on the key drivers influencing the end life destination of waste food in the context of scrap carbon generally with reference to available technologies and the economic influences impacting between agriculture, energy and material recovery for remanufacture.

The food versus fuel debate

Dr. Jonathan Scurlock - synopsis

Chief Policy Adviser, Renewable Energy, Climate Change and Non-food Crops, National Farmers' Union

Biography

As a senior adviser to the NFU, Jonathan's broad range of policy duties draws upon his technical expertise on energy and climate change policy, the global carbon cycle, renewable energy and, in particular, bioenergy. He advises the NFU President and management on national energy and rural affairs policy, including Climate Change Levy sector agreements, and continues to do occasional government consultancy work for DBERR (formerly Department for Trade and Industry).

Dr. Scurlock was formerly renewable energy project manager, North East Community Forests, and consultant to The Mersey Forest, where he facilitated biomass energy and other renewables projects, working closely with regional and local government as well as private sector partners.

Jonathan is also a Visiting Research Fellow at the Open University's Energy and Environment Research Unit. The author of more than 50 research papers and book chapters, he was educated at Oxford and London Universities. He previously spent five years as a government scientist in the USA, and prior to that was in the academic sector, specialising in biomass energy, the carbon cycle and plant physiology. He has worked in more than 30 countries, particularly on the African continent.

Abstract

Using crops like oilseeds, wheat and sugar to produce the raw materials for fuel is long-established and, until relatively recently, was seen as non-controversial. But lately, instead of offering a natural, climate-friendly alternative to dwindling reserves of fossil fuels, bio-fuels have been portrayed as 'a green con', which will drive up food prices, contribute to poverty and starvation in the developing world, and cause untold environmental devastation without even making any worthwhile contribution to reducing carbon emissions! The 'Food vs. Fuel' debate is an old argument that refuses to move on. Dr. Scurlock will review the many myths and misconceptions surrounding this subject area.