

# THE LAUNCH OF THE FOOD AND ENVIRONMENT RESEARCH AGENCY



Hilary Benn addressing the conference audience of 230 invited guests drawn from across the public sector, academia, other research institutes and commercial clients involved in food and farming, horticulture, agrichemicals and pharmaceuticals.

The Food and Environment Research Agency (Fera) was officially launched on 15 June by Hilary Benn, Secretary of State for Environment Food and Rural Affairs, at an event held at Fera's state-of-the-art facility at Sand Hutton near York. It was attended by an invited audience of over two hundred guests representing Defra, sister agencies, academic partners, other government departments, private sector clients and overseas customers..

In his opening address Mr Benn spoke of how the new agency will strengthen Defra's ground-breaking food, farming and environmental research programme, bringing together Defra's Central Science Laboratory, Plant Health Division, Plant Health and Seeds Inspectorate and the Plant Variety Rights Office and Seeds Division, and UK Government Decontamination Service into one agency.

He went on to outline how Fera will continue to enhance Defra's work in plant and crop protection, food chain safety, environmental risk assessment and crisis response, whilst at the same time facilitating better integration between policy development, scientific evidence and inspection services. The merger will also enable a more rapid response to protect the public interest, and remove delays for businesses involved in both national and international trade.

## AN INTRODUCTION TO THE ROLE OF FERA

Climate change, food security and environmental sustainability are presenting the global community with significant, complex and interrelated challenges. The Food and Environment Research Agency plays a vital role in horizon scanning, risk assessment and analysis of the evidence to guide policy response.

As Chief Scientist, my role is to ensure that Fera develops its scientists and scientific capability to deliver excellent quality research and evidence. We do this in strategic partnership with other organisations to ensure that our science and services have impact and provide value for money.

We see excellence in science as being at the top of our agenda to enable us to seek the right solutions to address the major national and global issues that threaten ecosystems, water and food supplies.

The Food and Environment Research Agency has organised its scientists into teams around the thematic science areas defined by our customers and so that we can deliver complex projects. Fera's science programmes and capabilities are outlined here.

### EMERGENCY RESPONSE AND RECOVERY

Preparedness is at the centre of being able to respond to, and recover from, a deliberate or accidental Chemical, Biological, Radiological or Nuclear contamination incident. The programme is an essential part of a national capability to enable the UK environment and public life to be brought back to normal as soon as possible.

### CHEMICAL RESIDUES

We provide scientific analysis, testing, research and development to help

responsible authorities across government ensure foodstuffs comply with regulations on pesticide and veterinary drug residues. Key to our success is the ability to develop faster or more sensitive detection techniques.

### CONTAMINANTS AND AUTHENTICITY

There are many potential contaminants that can find their way into the food chain in addition to those relating to known interventions such as the use of pesticides and veterinary drugs.

Science teams in this area are expert in the tools and techniques for identifying other sources of contamination such as organic environmental contaminants, food processing contaminants and natural toxicants. In some cases the work may involve detecting and identifying unknown substances



Professor Nicola Spence Chief Scientist at Fera looks at some of the work the agency undertakes.

or profiling complex mixtures, both of which can be important in authenticating a substance or an origin claim in food stuffs.

## CROP AND FOOD SECURITY

Our research in crop and food security is focused on finding new and sustainable ways to protect growing crops, stored food and the environment from pests and diseases. Using a multi-disciplinary approach from molecular biology through to field-based surveillance, the programme's main research themes include the development of novel diagnostic and bio-analytical methods, pest and disease management, bee health and innovative pest control strategies.

## ENVIRONMENTAL RISK

Much of the work in this area centres on the effects of chemicals in the environment. This can range from the effect of pesticides on target and non-target vertebrate and non-vertebrate species, through to the fate and behaviour of pharmaceutically active compounds and nanomaterials, when they get into the natural environment.

## WILDLIFE MANAGEMENT

Our science teams work with Government providing the research to inform the ongoing development of wildlife management and animal welfare strategies. They also play a significant role researching and modelling the population dynamics, risks and conflicts that occur between large-scale wildlife populations and conservation.

We also work with the aviation and renewable energy industries to reduce the risks of bird strikes.

## WILDLIFE AND EMERGING DISEASES

Fera's science teams in this area provide research, advisory and operational services in relation to diseases of wildlife, livestock and zoonotic infections of humans. They contribute to disease control by developing effective wildlife management options and by helping implement these.

By integrating the skills of veterinarians, ecologists, mathematical biologists and wildlife management specialists, we have a unique breadth of understanding and the ability to deliver practical solutions to disease problems and human-wildlife conflicts.

## PEST AND DISEASE IDENTIFICATION

Our work is focused on plant pest and disease identification and control, supporting both the development of plant health policy, Fera's Plant Health and Seeds Inspectors and the industry. Vital to both is the drive to develop faster and more accurate frontline in-the-field diagnosis techniques.

We have a broad range of science skills within these teams including bacteriologists, entomologists, mycologists, nematologists, molecular biologists and virologists.

## INSPECTORATES

The inspectorates work in partnership with those required by law to use their services. Their aim is to educate users about Government policies and where possible to advise on how to avoid risks from pests and diseases or how to deal with issues relating to quarantine or enforcement notices. Fera's inspectorates cover bee health inspection, plant health inspection and certification of plant materials for import or

export, and meeting licence requirements or import restrictions on genetically modified organisms.

### FERA AT A GLANCE:

#### Fera:

- has over 40,000 government and commercial customers
- runs over 600 research projects
- provides services to customers in over 100 countries
- analyses over 50,000 plant and food samples a year
- carries out over 150,000 plant and bee health inspection visits a year
- works with more than 1000 collaboration partners
- has a turnover in excess of £72 million a year
- employs around 900 people including over 500 scientists and 150 plant and bee inspectors
- is the National Reference Laboratory for chemicals in food, pesticides, veterinary drugs, dioxins and PCBs in feed
- scientists have published over 30 papers in peer-reviewed journals listed in the Science Citation Index since vesting in April 2009

### CONCLUSION:

The Secretary of State set the bar high when he spoke at the launch of Fera in June, highlighting the global challenges we face – climate change, degradation of the environment, and scarcity of resources. And all this in the context of the world needing to be able to feed nine billion people by 2050.

The Food and Environment Research Agency has a key role to play in meeting these challenges. Our over-arching purpose is to support and develop a sustainable food chain, a healthy natural environment, and to protect the global community from biological and chemical risks.

Our role within that is to provide robust evidence, rigorous analysis and professional advice to Government, international organisations and the private sector.

Fera has accountability for a number of areas of Government policy in relation to plant health and other matters. In order to improve our policies in these areas, we need the assistance of our customers, including Parliamentarians, to work with us and express their views freely. I would ask and encourage all our stakeholders to participate in any future consultation programmes Fera undertakes. We will continue to use our stakeholder database to contact interested parties proactively but our website will always carry details of any active consultations Fera is involved with.

Looking ahead, the future is challenging and exciting. We will be applying our expertise to research, development and knowledge transfer to fill the knowledge gaps and provide robust evidence to support future policy.

However, we cannot do this alone, and we look forward to working together both with public, academic and private sector partners.

To find out more about us and our work programmes, please visit our website at [www.defra.gov.uk/fera](http://www.defra.gov.uk/fera)

