

Press release: New centre for sustainable aquaculture aims to unlock solutions to global food security

With the world's population set to increase to almost 10 billion by 2050, providing future generations with safe and sustainable farmed seafood is the critical aim of a new collaboration between the Centre for Environment, Aquaculture and Fisheries Science (Cefas) and the University of Exeter.

The Collaborative Centre for Sustainable Aquaculture Futures has been launched today by Environment Secretary Michael Gove, with an ambition of bringing together world-leading scientists to ensure the key challenges facing sustainable growth of the aquaculture industry are better understood, both at home and internationally. The centre will focus on aquatic animal health, food safety and protection of the aquatic environment – in support of international food security and sustainable “blue” growth.

Key issues to be addressed by the centre include:

- providing scientific support to reduce the \$6bn annual losses due to disease in aquaculture
- providing evidence and tools to ensure that fish, shellfish, crustaceans and seaweeds produced in the global industry are safe to eat
- understanding how cutting edge molecular diagnostics, pathology, animal breeding and nutrition can be applied to assist seafood farmers, particularly in more vulnerable societies
- ensuring that aquaculture is developed sustainably, for the benefit of communities, economies and the environment.

Speaking at Cefas' annual science conference, Environment Secretary Michael Gove said:

As we work towards a Green Brexit, it is crucial we tackle the challenges facing our marine environment and Cefas' commitment to scientific research and innovation has never been so important.

The new centre not only establishes our position as a world leader in marine science and sustainability, but will prove critical to the health of our fisheries and the economic vitality of our coastal areas – helping us in our continued drive to leave the environment in a better state for the next generation.

Speaking on behalf of the new centre, co-Director and pathologist Professor Grant Stentiford from Cefas said:

The launch of this centre is timely – by acting now to apply UK

science expertise to the barriers that currently stand in the way of a safe and sustainable future aquaculture industry, we will help ensure food security for future generations and continue to support our national, as well as international commitments to the environment.

For the first time, government and academic science related to aquaculture sustainability is coming together in support of development and consolidation of the global industry. The Centre will co-design solutions in national, regional and global aquaculture sustainability and is uniquely positioned to support the rapidly expanding global aquaculture industry.

A Strategic Alliance has existed between the Centre for Environment, Fisheries and Aquaculture Science (Cefas) and the University of Exeter since 2012. The Alliance combines the complementary capabilities of a cutting-edge Government laboratory and, a leading Russell Group University. The alliance has increasingly focussed on solving intractable problems in the sustainable supply of food from the aquatic environment.

Professor Charles Tyler, co-Director of the centre from the University of Exeter said:

We are delighted to be able to strengthen our collaboration with Cefas in the area of aquaculture. Making aquaculture 'work' for the environment and for society is a grand challenge and one which requires both broad thinking and, a truly interdisciplinary scientific team.

Given that animal disease and food safety present two of the most significant hurdles to sustainable production, we will place major focus on scientific research and advice where the impact to industry and society will be highest.

Examples of current projects that the centre will take forward include:

- 10 joint PhD studentships in aquatic animal health and food safety funded between 2015-2020
- Joint aquaculture health projects funded by Newton/BBSRC in India, Bangladesh and Malawi
- Newton funded programmes in Thailand, focussed on new models for controlling disease in aquaculture.

Whilst linking up specialists from across the University, the new Centre will closely align with the recently-opened Living Systems Institute, a world-class collaborative research facility focused on the mitigation of disease in plants, animals and humans.