

## **Animal Science Critical In Meeting Future Food Security Challenges**

The British Society of Animal Science (BSAS) has called for a more informed and holistic approach to discussions on the future of livestock production in the UK, in order to meet the challenges of increased global demand for livestock products whilst safeguarding the environment and maintaining vibrant rural communities. This was one of the key recommendations emerging from a major international conference organised jointly by BSAS and the Irish Agricultural Research Forum, at Queen's University, Belfast this week. The Conference 'Food, Feed, Energy and Fibre from Land – A Vision for 2010' was attended by almost 500 delegates from across the world.

A number of keynote speakers at the Conference expressed concerns regarding the current focus on some negative aspects of livestock production, rather than considering the pros and cons of livestock production as a whole. For example, ruminant livestock production is pilloried as a major cause of Greenhouse Gas Emissions within the UK, yet the overall picture is very different, with agriculture as a whole responsible for less than 7% of total UK Emissions. The BSAS President, Dr Sinclair Mayne highlighted that ruminant livestock - cattle and sheep - have many positive impacts on our environment and society which are often overlooked. For example, upland beef and sheep production, a sector under particular threat, makes minimal use of fossil fuels yet maintains rural communities in some of our most isolated regions and is a significant source of human food production from areas unsuitable for crop production. If the current decline in hill farming is allowed to decline, as is already happening over large swathes of the country, not least the Scottish Highlands and Western Isles, the impact on biodiversity, wild life habitats, the landscape, flood control and food production will be a huge concern for future generations.

Dr Mayne stressed the need for animal scientists to communicate these concerns to society as whole and to farmers and policy makers in particular. More efficient production of beef, lamb and milk will curtail Greenhouse Gas Emissions and ensure the agricultural industry can give the UK, Europe and the wider global community a secure supply of food. Security of food supply is fast becoming a major issue, with global demand for livestock products predicted to double within 40 years and already more people than ever enduring malnutrition in parts of Asia and sub Saharan Africa.

Keynote speakers at the Conference also highlighted how farmers are under pressure not just to produce food, fuel and fibre, but must also meet strict environmental and animal welfare standards in order to qualify for EU Common Agricultural Policy payments.

Conference delegates called for increased investment in research and development in livestock production in order to inform government policy and improve the competitiveness of livestock farming in the UK and Ireland. Delegates expressed particular concern regarding the current lack of profitability of livestock farming in the UK and Ireland. Data presented at the Conference showed that a typical UK farm running beef and sheep would have incurred a considerable loss without EU Single Farm Payments and funding through environmental management schemes. This lack of profitability is reflected in the major decline in livestock numbers in recent years, with cattle numbers in the UK in decline for over 30 years, from a peak of 14 million in 1976 to 10 million today, whilst the national sheep flock has declined from 43 million, 20 years ago, to the current 33 million.

In concluding the Conference, Dr Mayne commented on the major contribution that research in animal science had made to livestock farming in the UK and Ireland in the last four decades, and the need for research to contribute even more in the coming decades. “Global demand for livestock products is predicted to double in the next four decades, whilst climate change is predicted to reduce food production in many parts of the world –

with the potential for major social and political implications. Within North West Europe, it is predicted that climate change will have less impact on agricultural productivity, and we have farmers with the skills and knowledge to produce high quality livestock products from land that, in many cases, is not well suited to grow human food directly. This presents a real opportunity for livestock farmers in the UK and Ireland. However, it is critical that we have the industry capacity, and the science capability to rise to these challenges. Research and development will be critical in helping us to develop efficient livestock systems that can deliver safe and healthy livestock products whilst enhancing the environment and respecting animal welfare”

For further information visit the British Society of Animal Science website [www.bsas.org.uk](http://www.bsas.org.uk) or contact Chief Executive Mike Steele (mike.steele@bsas.org.uk) and Dr Sinclair Mayne (President) on (Sinclair.mayne@dardni.gov.uk)