

How climate change will impact on diet and what is the regulatory responsibility? - Professor Susan Jebb

FSA Chair Professor Susan Jebb earlier addressed the Global Conference for Food Safety and Sustainability, organised by the FSA and Food Standards Scotland.

The conference brought together regulators, food and feed scientists, consumer groups, industry experts, and academics from across the food system to discuss how the food system responds to the challenges of climate change.

Transcript of the speech as follows:

Introduction

It is my great pleasure to welcome you to this session where we will be focusing on the responsibility that food regulators have in responding to the impacts of climate change on our diets, or indeed helping to mitigate the effects of climate change.

This is a really important area. Globally, food, especially agriculture, is responsible for 26 per cent of greenhouse gas emissions. While in the UK it's slightly lower at 19 per cent, with the bulk still coming from primary food production.

We know from [our own research](#) that it is an issue citizens care about deeply. Our survey this summer found that more than half of adults are looking to make some changes to what they eat. And more than two thirds want the government and food industry to do more to enable change in the food system.

I'll admit to being a little disappointed how little of the conversation at COP 26 has focused on food, but I hope this meeting adds to the voices of some of the other fringe meetings to really help raise the profile of some of the issues that we face in the food system, and which are going to be so vital to addressing the challenge of climate change.

We see daily headlines about the catastrophic impact of the food system on the planet but, I'm pleased to say, headlines too of some new innovations that might help us to change course – whether that's new ranges of plant-based products, edible insects or lab-grown meat.

So, what I want to consider as Chair of the FSA, is the role for regulators like the FSA in responding to these issues?

As regulators, we need to protect consumers and ensure food is safe and is what it says it is. Some of the risks will change as a consequence of climate change, and we need to help the businesses we regulate to prepare and respond to the challenges that climate change presents.

There are three reasons why the FSA is concerned about climate change:

- **It's the right thing to do** - it's what every organisation should be doing.

- **We have a lot to offer** - whether it's our science, the evidence and the analysis we can do, or as a voice for consumers in policy making, or our experience of working with businesses to help them make changes for the public good. These are all things where we have an established track record and I think we can apply to some of the challenges of climate change.
- **We don't have a choice** - if we don't act now to play our part in tackling climate change, we will be much less able to keep food safe.

But we need to act in partnership with consumers, with businesses and the rest of government.

We are a non-ministerial government department responsible for food safety and standards in England, Wales and Northern Ireland. And we work closely with our sister organisation Food Standards Scotland. Our mission of food you can trust means that we work to mitigate food risk from farm to fork.

We have around 1,300 staff including inspectors, enforcement experts, policy professionals, economists, statisticians, analysts, researchers, and veterinarians. A whole range of people who are focused on the food system.

Their work prevents harmful pathogens from emerging in food processing factories, keeps shellfish beds safe, prevents allergen contamination and ensures animal welfare and food safety rules are being followed in meat plants. A whole raft of different processes and procedures that we do routinely to keep the food system safe.

When we think about that broad portfolio of responsibilities it is not difficult to imagine that climate change could impact on all of these areas.

Rising temperatures mean food and feed chains are at greater risk from pathogens and other hazards like aflatoxins, the toxic substances caused by fungus. Extreme weather conditions are disrupting harvests and supply chains, increasing the risk of food incidents and food crime.

Regulators must be alive to a complex set of risks and hazards that climate change could bring. The FSA's Science Council, an independent committee of experts that advises us, is already investigating the possible food safety implications of changes to achieve net zero. While other reviews are planned to look at the disruption to the food chain caused by climate change.

Responding to the impact of climate change

But what is important to remember is that these are not just potential future risks.

The impacts of climate change on food are already being felt around the world. Extreme weather conditions are affecting the harvest of certain key ingredients, causing shortages and price hikes in the global food chain.

For example, drought conditions in Canada recently have affected the harvest of durum wheat in Canada, one of the world's biggest producers. This has reportedly pushed the price of durum wheat up by nearly 90%, with the prospect of significant price rises for consumers buying this staple food. A real concern at a time of rising food insecurity, even in a rich country like the UK.

These disruptions to harvests test the resilience of supply chains and as a consequence some countries have become increasingly reliant on food imports, making them potentially more vulnerable to food shortages as major agricultural exporters limit exports to feed their own populations. Disruption like this increases the risks to the global food supply network.

So, what does this mean for regulators? First and foremost, we need to be very effective in responding to risks and hazards in the food chain.

International co-operation and engagement is going to be absolutely vital. Organisations like INFOSAN and Codex are really crucial to keeping the global food system safe. I was absolutely delighted that one of our colleagues at the FSA, Steve Wearne, was appointed as the new Chair of Codex yesterday. I know that Steve will work tirelessly to do the very best he can for the global food system.

I was really pleased too that earlier this year we hosted a very successful Global Food Safety Conference which brought together regulators from around the world to try to enhance our knowledge sharing. I am absolutely convinced that we all do better if we work together in managing incidents and in organising our emergency preparedness.

Regulators also need to be agile in the way we enforce our regulations. We saw this during the COVID-19 pandemic. We needed to respond quickly to a rapidly developing situation, to change policies and adapt regulatory requirements to support the food industry in maintaining a safe supply of food at this time of crisis.

This type of flexibility will be essential as we support the food industry in responding to adverse effects of a changing climate.

Mitigating the effects of climate change

But protecting the interests of consumers in relation to food is not just about reducing risks, it's about looking ahead and mitigating the risks. So, what can we do there?

We need a less wasteful system. We need to buy and eat only what we need, so we minimise our use of environmental resources by producing just the right amount of food for our needs, reducing waste, and reducing over-consumption.

We also need to do our part in reducing the environmental harms of food production. And in the context of climate change, we need to look specifically at meat production and consumption.

Beyond those mitigation actions, we also need to look to find solutions that are kinder to the planet and that will require a culture of innovation. Our own research has indicated that consumers are increasingly seeking more sustainable food sources. Two thirds of consumers thought the government should be doing more to encourage people to eat more sustainable diets.

As regulators, we need to ask ourselves whether we have the right regulatory systems that continue to protect consumers, but also allow the food industry to develop the solutions we need in a changing world.

What could a regulator like FSA do to make a difference?

Let me give you three examples. They are not the only examples, but I think they illustrate different aspects of this issue.

First, as I've indicated, we could look at how we support innovation in the food system to encourage more sustainable production or new food types. Since the UK left the EU, the FSA has been responsible for approving new food and feed products before they go to the UK market.

Safety will always be the absolute priority in the risk assessment process, but we could also consider the implications of new products through the lens of environmental sustainability.

This might include developing a new regulatory framework for gene-edited foods, or how we support the development of the market for edible insects or alternative proteins, which could potentially reduce carbon emissions from the food system.

These are exciting innovations that could make a real contribution, so we want to work with the food industry to explore their potential and to help them through the regulatory process.

But we must maintain the consumer interest at the heart of our decision making. I know that many consumers have reservations about new processes and products, but equally others want to see this kind of innovation to support a more sustainable diet. And we need to find a balanced way through those different views. We need a clear and transparent process that carries the trust and confidence of consumers.

Second, we might consider labelling. Our research has shown that consumers have a good understanding of what a healthy diet is, but there is quite a big knowledge gap in relation to sustainable food choices.

Industry is already stepping into this space with a plethora of eco-labelling schemes from logos to quantitative data reflecting the life cycle analysis of their products. [Robin May, our Chief Scientific Adviser, wrote a blog about this at the weekend](#) and that really sets out our belief that regulators need to play a part in both assuring the data used to make sustainability claims and in how this information is conveyed to consumers to best aid informed choices.

Third is the question of public procurement of food. In England, we already have government buying standards designed to encourage healthier and more sustainable procurement. Some parts of the public sector, such as schools, have standards for food served and the public sector more broadly could role-model sustainable food options.

Government spends millions of pounds each year on food and that means it has a potential to have a very big influence in the system to drive change in industry practices. But at the moment procurement standards are neither monitored nor enforced. With proper resourcing, regulators are well placed to make sure that food provided by the public sector also upholds the government's sustainability goals.

I hope what I have shown you is that there are potentially a number of ways, in which we can use food standards to maximise opportunities for food to do good for people and the planet and not just as a way of minimising risks in the food system.

Conclusion

Food is vital for life. It is important to all of us and affects us every single day. We have done a huge amount as regulators to improve food safety, but I firmly believe that the time is now right for us to look at other risks in the system.

But the food system itself is contributing significantly to the carbon emissions that threaten our planet. Arguably that is one of the biggest risks we face.

Thinking about food in the context of climate change is going to be a challenge for all of us. This meeting is a fantastic opportunity for us to acknowledge the role of regulators and also a chance to learn from each other about what we need to do.

The discussions today will help shape our emerging strategy within the FSA and help crystallise the areas in which the FSA can add greatest value, working alongside many other partners in government and industry.

I am constantly reminded that we owe this to consumers today and for future generations.