

## Food Security and Climate Change Roundtable

Tuesday, January 24, 2017, 14:00 – 16:00

Committee Room 5  
City Hall, London



### Attending:

Chris Rapley, UCL, LCCP Chair  
Rosie Boycott, London Food  
Shirley Rodrigues, GLA  
Manuela di Mauro, Adaptation Sub-Committee  
John Ingram, Environmental Change Institute  
Doogie Black, Trioss  
Tim Reeder, LCCP  
Briony Turner, UKCIP/ARCC  
Michael Hafskjold, Cabinet Office CCS

Vicki Hird, Sustain  
Caroline Jessel, NHS  
Alison Tedstone, PHE  
Robert Hall, London First  
Alan Dangour, LSHTM  
Graham Bickler, PHE  
Kelly Dallen, London Resilience  
Mark Ainsbury, GLA  
Kristen Guida, LCCP

### Introductions and welcome

Chris welcomed attendees and led introductions. He said that the UK Climate Change Risk Assessment evidence report published in July 2016 identified food security as a top priority risk to the UK—in terms of resilience of supply chains, food price spikes and volatility, and food safety. The LCCP, after discussing the issue briefly with Rosie in October, agreed to organize a further discussion to learn more and to understand how the issues will affect London in particular, and to work out what needs to happen at different levels of decision-making to ensure the resilience of the city, food-wise.

The first part of the meeting was dedicated to understanding the problem and reviewing the evidence. The second part was aimed more at identifying potential solutions and opportunities to address the problem, through policy and other initiatives.

### UK Climate Change Risk Assessment evidence on food security risk

Manuela explained the role of the Adaptation Sub-Committee in scrutinizing Government's climate change adaptation plans and the state of adaptation in the UK. The ASC also wrote the evidence report for the 2017 [UK Climate Change Risk Assessment](#), which was the basis for the [Government's report](#) in January 2017.

Manuela described the methodology of the evidence report and the evidence that the ASC considered. The ASC identified 56 primary risks from climate change, and grouped these into common "risk areas," which were then given different urgency ratings: More Action Needed, Research Priority, Sustain Current Action, and Watching Brief. Six risk areas were placed under More Action Needed, including risks to international and domestic food production and trade.

To determine risks to food security, The ASC looked at domestic and international components of the UK food system, including direct impacts of weather on agriculture and water for farming, as well as indirect impacts such as price shocks and trade disruption due to political instability, and pests and diseases that could threaten access to safe and nutritious food.

Manuela mentioned some of the measures that Government uses to monitor and react to threats to food security. Government's assessment is that food security in the UK is strong, but the ASC recommends a more proactive stance, including:

- Indicators of food security that consider future risk, not just current conditions
- A national, strategic approach to support climate-resilient agriculture in the UK and abroad, build strategic trading partnerships, and ensure supply chain resilience
- Local capacity building to reduce waste and GHG emissions, ensure the protection of vulnerable people, and improve resilience of business and infrastructure.

The presentation slides will be circulated alongside this note.

There was discussion of the indicators of food security; it was noted that food banks might be a poor indicator of insecurity. The group was also cautioned to be careful about linking social class and poor diet, as public health research shows that poor diets exist independently of social class.

Further reading:

[UK Food Security Assessment](#) (Defra) August 2009. Defra is currently reviewing the indicators for this assessment.

[Food Statistics Pocketbook 2015](#) by income (Defra).

### **Nature of the food system: vulnerability to shocks and relationship to environmental change**

John introduced his work on understanding the food system and the different activities that make up the food chain. He noted that food manufacturing is the largest industry in the UK.

The FAO definition of food security is mainly focused on access and the constraints to access.

While all food systems are exposed to shocks such as agricultural diseases, food scares, bioterrorism, city food systems have particular vulnerabilities because of their reliance on infrastructure and logistics (e.g. storage) that are susceptible to extreme weather and other infrastructure shocks (e.g. floods).

John also set out some components of resilience;

- Robustness: the ability to resist shocks: more robust storage (London has about 1.5 days' food supply).
- Recovery: the ability to pick up again after a shock: ability to repair damaged infrastructure
- Reorientation: rebuilding after a shock to a different system than where you started out (e.g. changing diets)

Options for Reorientation include: urban horticulture (better term than urban agriculture) to help a city get vitamins; changes in diets; re-using waste, especially returning nutrients in wastes and sewage to agricultural land.

John coordinates the UK Global Food Security Program's "Resilience in the UK Food System in a Global Context" research program, and a case study on resilience of London's food system could form a valuable additional activity.

### **Public Health and food**

Alison challenged some of the accepted ideas and assumptions about food security or insecurity, and said that given the prevalence of obesity and overconsumption of food in the UK, the goal of food security and climate change action should not be an increase in calories.

She said that there is no large difference in dietary patterns, overweight, and obesity among different social classes, and that obesity is doubling in both affluent and poor populations, with men on average consuming 300 more calories per day than recommended, women 200. While the data make the UK look bad in this regard, she said that the sheer volume of public health and nutrition data in the UK—more than in most other countries—may skew the picture to make the UK look worse than it is.

The traditional response, consisting of a bit of education and awareness-raising, has been inadequate in the face of cheap food, heavy marketing, and the normalization of obesity. But PHE is working with industry to take calories out of the food chain.

There is little evidence of under-nutrition in the UK (less than five percent of children).

Alison's presentation will be circulated with this note.

### **Discussion/Q&A**

If UK diets met the “healthy plate” recommendations featured in Alison's presentation, the UK could reduce its greenhouse gas emissions by 17 percent.

There is some suggestion that climate change will reduce the nutrient composition of fruits and vegetables, and methods of calculating this vary, but nutritional composition largely stays the same. It was noted that less CO<sub>2</sub> in fertilizer could have an effect.

With childhood obesity at alarming levels, why is the government taking such a soft “nudge” approach to changing behavior? The answer has to do with the high contribution of the food system to UK GDP, in part. It's highly subsidized despite imposing high risk on the population. The good food plate recommends a sharp reduction in dairy consumption, which farmers don't like. Also, any policies that suggest a “nanny state” are opposed by this government. However, the recent sugar levy has helped to change the conversation. Note that trade agreements would reduce sugar prices.

It is thought that linking the food system issues with climate change might also help to advance the conversation – given the potential for a 20 to 25 percent reduction in footprint.

Adaptation will have winners and losers. At the moment the price of food is too low.

### **Solutions and opportunities**

Vicki introduced Sustain, an alliance of 100 national public interest organisations working for better food and farming. Sustain advocates food and agriculture policies and practices that enhance the health and welfare of people and animals, improve the working and living environment, enrich society and culture, and promote equity.

Action to tackle climate change is clearly urgent, but how far this does and could affect food security in the widest sense is not established.

Food security is about how far people have the right to food (nutritional security, not merely calories) and can exercise control over their food access. Food Security per se can mean just having the finance to buy food from wherever it is cheapest.

Relying on overseas and long distance markets, however, makes us:

- vulnerable to supply shocks,
- unsustainable in terms of emissions, chemicals, loss of control in complex chains and connection with farmers and
- irresponsible – drawing land and water supplies from around the globe – trade not bad but should be sustainable and ethical.

Longer term, London will be at risk from less stable supplies, especially from overseas, with the most vulnerable feeling the impact first. At the moment, this threat seems far away and intangible, which makes planning and communicating even more challenging.

Vicki outlined some of the specific characteristics and interdependencies of London that make tackling food security a particular challenge, and found solutions and opportunities in three areas:

- consuming and eating
- farming and producing
- governance

The full text of Vicki's presentation will be circulated along with this note.

In a brief discussion, it was noted that the London Plan provides opportunities in its provision of land to grow food. It also enables boroughs to do Local Development Frameworks, which can be used to promote sustainability.

Also, any plans to increase urban farming/horticulture should include an understanding of the risks of contaminated land in a changing climate, as well as the net water and energy fluxes in parts of a city, considering green infrastructure and the water planning necessary to ensure its viability.

### **London Environment Strategy**

Shirley said that the GLA is working on a range of strategies, which are aimed for publication in the spring, and so this is a good time to be trying to inform those strategies and link them together. One of these is a new integrated London Environment Strategy, which brings several existing strategies and plans together into one. Others include strategies around procurement, energy, food waste, circular economy, and spatial development. Forums are being set up by the GLA to bring in stakeholder contributions to these.

Mayor Sadiq Khan has committed to making London a zero carbon city by 2050, and there are a number of other commitments in the environment arena that touch on food issues.

The Mayor's powers are limited, as is his budget. However, he has strong convening power. The C40 has published reports on the powers of cities to effect meaningful change on climate change.

Note that there are new mayoralities coming to nine different UK cities. There should be some coordination on issues, and London could share its experience on climate change adaptation.

Further reading:

[Powering climate action](#): a review of the powers and governance approaches used by cities to address climate change

[Potential for climate action 2015](#): C40 quantifies potential for expanding urban climate action.

### **London Food Strategy**

Rosie said that the GLA is developing a new food strategy for London, which will not be statutory—thus the need to integrate it with other strategies and initiatives including learning, obesity, social inclusion, climate change. Using the environment and climate change can help to tell the food story, and promote understanding of the ripple effects of a meal.

She said that the food policy team is looking for effective and realistic aims, deliverables, and partnerships to inform the new strategy.

### **Discussion/Q&A**

Prioritization will be important to keep any commitments realistic.

The administrative infrastructure of a city can allow for joined up thinking. It will be important to use that to meet common aims.

Partnerships are helpful in formulating robust responses, and ones that provide multiple benefits – linking with health, environment, air quality, finance, etc.

Commuters eat some 33 million meals per day in London. What is the opportunity there?

A good evidence base is needed to underpin policy and other initiatives. At the moment, we don't have evidence on London's "food print" or on the energy flows in and out of the city. We also don't have an understanding of the thresholds for failure of food security into the medium term. This would require thinking through to the worst-case scenarios, so that we know what we're adapting or re-orienting to. A good evidence base would also have to be translated for boroughs and other levels of decision-making in order to help them use it properly.

There was mention of the heavy marketing of food, but there is no opposing force to that. The behavior change unit in the NHS could be helpful in this respect.

Two important audiences for engagement would be schools and the entertainment/events industry, the latter of which did good work on sustainability during the Olympics in Olympic Park venues.

The Collier Foundation is investing in the infrastructure of the food system in London; perhaps good for the London Food Board to get in touch.