

<b>Institution: City University of London (City)</b>		
<b>Unit of Assessment: C21 Sociology</b>		
<b>Title of case study: Creating food policy to achieve sustainable diets and to transform food system sustainability</b>		
<b>Period when the underpinning research was undertaken: 2013-2020</b>		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b> Tim Lang	<b>Role(s) (e.g. job title):</b> Professor of Food Policy	<b>Period(s) employed by submitting HEI:</b> November 2002 - January 2021
<b>Period when the claimed impact occurred: 2013-2020</b>		
<b>Is this case study continued from a case study submitted in 2014? Y/N YES</b>		
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)          Professor Tim Lang's research has changed food policy and food system discourse at international, regional, national and sub-national levels through his mainstreaming of the 'sustainable diets' concept and his development of a 'multi-criteria' policy approach to food system dynamics. These research insights and findings have been applied in policy-making at different levels and scales of reach by beneficiaries in government, civil society and business. Specific examples of impact are: 1) the EU's civil society 'comprehensive food policy' being incorporated into the EU's landmark 2020 <i>Farm to Fork Strategy</i>; 2) use of the 2019 EAT-Lancet report <i>Food in the Anthropocene</i> for food system change by multiple stakeholders globally, for example the development of Nordic food policy; 3) the 2015 Milan Urban Food Policy Pact signed by 209 cities worldwide by 2020; 4) House of Commons select committees' policy recommendations including the 2019-20 House of Commons commissioned Climate Assembly UK; and, 5) policy responses for post-Brexit UK food security and the Covid-19 pandemic based on the analysis in Lang's 2020 book <i>Feeding Britain</i>.</p>		
<p><b>2. Underpinning research</b> (indicative maximum 500 words)          Lang's research over the REF2021 period developed a six-point integrated model (human health, ecosystems health, socio-cultural values, political economy, governance, and food quality). This 'multi-criteria' approach is now being applied to shape policy solutions and food system dietary change. The research set out here has been used to inform and support knowledge, expertise and evidence in multi-criteria food policy, particularly injecting social criteria into what is meant by food sustainability [see 4.1-4.5].          This has been a long policy journey with the 'sustainable diets' concept being downplayed at its origins in the 1980s and only gaining traction in the past 10-15 years [3.1]. Lang has been at the heart of this shift and led the interdisciplinary workshop which formulated the now much-cited definition of sustainable diets [3.2, p.7] during the 2010 International Scientific Symposium on '<i>Biodiversity and Sustainable Diets: United Against Hunger</i>', organised by the UN Food and Agriculture Organisation (FAO) [3.2]. Since 2013 Lang was involved in four major research activities that furthered the analytical and evidential foundation for sustainable diets and food systems change.</p> <p><b>2.1 EU 7th Framework collaborative research programme GLAMUR (<i>Global and Local food chain Assessment: a MULTIdimensional peRformance-based approach</i>)</b>          The GLAMUR programme (2013-2016) used primary research to examine EU food chains as 'holistic' systems, going beyond narrow economic studies based on consumer buying decisions, and developed case studies on their sustainability performance. The Programme's policy research, with Lang as PI, identified challenges and trade-offs facing EU policy-makers [3.3]. Research insights included: the need for policy-makers to recognise the relationships and often strong links between global and local food systems; the complexity of different stakeholder commitments needed to achieve food sustainability; the need to identify policy 'blind spots' and how to address these; the need to pursue multi-criteria interventions; and engagement with both</p>		

science-based evidence and socio-cultural values [3.3]. This research has been used in Lang's contribution to the impacts set out in all the sections 4.1-4.5.

## **2.2 Developing a multi-criteria model for enabling sustainable diets**

In 2015-2017, Lang together with Dr Pamela Mason (a former member of City's Centre for Food Policy), analysed more than 1000 texts from the academic and grey literature to investigate the policy aspects of 'sustainable diets'. From this they developed a multi-criteria model for sustainable diets policy under six headings: 1. Food Quality, 2. Social Values, 3. Environment, 4. Health, 5. Economy, and 6. Governance [3.4] to serve as a guide for use by different stakeholder groups [3.4]. The research was used to: form the work of the European Economic and Social Committee in developing its 'comprehensive food policy' [4.1]; to shape the implementation of the Milan Urban Food Policy Pact [4.3]; and as evidence presented to the UK Citizens' Climate Assembly [4.4].

## **2.3 The EAT-Lancet Commission report on Food in the Anthropocene**

The EAT-Lancet Commission (see 3.2.2 below) was a collaboration of 37 world-leading scientists supported by EAT, a non-profit founded by the Stordalen Foundation, Stockholm Resilience Centre and the Wellcome Trust, and *The Lancet* medical journal. The interdisciplinary programme (2016-19) investigated universal and scalable planetary boundaries for the food system. It developed for the first time quantitative scientific targets to create a "safe operating space for food systems" [3.5, p.447] to feed a world population of around 10 billion people healthily in 2050. Lang was appointed as one of the five core EAT-Lancet Commissioners and led the policy research. The final peer-reviewed report was launched in 2019 in 35 countries and published in eight languages [3.5]. To achieve healthy diets the Commission's analysis demonstrated the need for increased consumption of plant-based foods and reduced consumption of animal source foods (especially red meat and dairy foods) [3.5]. Based on the report's research and analysis the Commission set out five strategies for food system transformation which included policy 'levers' such as investment in public health information; improved co-ordination between health and environmental policy-makers; and re-orientating agricultural policies from high quantity production to healthy food production. In 2020 a new Food System Economics Commission was announced to build on EAT-Lancet and focus on food system economics. The work is supported by EAT, the World Bank, the World Economic Forum and World Business Council for Sustainable Development and will feature at the UN's 2021 Food Systems Summit. Multiple stakeholders from government, civil society and business are using the EAT-Lancet report, with Lang's contribution taken up, for example, in the European Economic and Social Committee [4.1] and the development of Nordic food policy [4.2].

## **2.4 Feeding Britain: Our Food Problems and How to Fix Them**

Researched over a two-year period (2017-19), Lang's *Feeding Britain: Our Food Problems and How to Fix Them* was published on 26 March 2020 aimed at the public and policy-makers [3.6]. Its analysis is that a secure UK food system requires sustainable diets to be normalised and supply chains re-oriented to be low-impact, resilient and equitable. The research, using multi-criteria methodology, identifies systemic stresses and fragilities in the UK food system. Especially pertinent to its impact, Part 3 sets out 33 detailed proposals for future-proofing UK food security, including introducing a post-Brexit Food Resilience and Sustainability Act; raising food self-sufficiency from 53% to at least 80%; and promoting Sustainable Dietary Guidelines to consumers. The immediate impact from the research has been its use as a reference point, not just in the media, but in extensive public and policy engagement from Whitehall to public meetings [4.5].

## **3. References to the research (indicative maximum of six references)**

**3.1:** Lang, T. and Mason, P. (2018). 'Sustainable diet policy development: implications of multi-criteria and other approaches, 2008-2017'. *Proceedings of the Nutrition Society* 77 (3), 1-16. doi: 10.1017/S0029665117004074.

**3.2:** FAO (2012). *Proceedings of the International Scientific Symposium Biodiversity and Sustainable Diets: United Against Hunger* 3-5 November 2010. Rome: FAO. Available at: <http://www.fao.org/3/i3004e/i3004e.pdf> (Accessed 25.2.21)

**3.3:** Smith, J, T Lang, B Vorley, D Barling (2016). 'Addressing Policy Challenges for More Sustainable Local-Global Food Chains: Policy Frameworks and Possible Food "Futures"', *Sustainability*, 8, 299; doi:10.3390/su8040299 <http://www.mdpi.com/2071-1050/8/4/299/pdf>

**3.4:** Willett, W., J. Rockström, B. Loken, M. Springmann, T. Lang, *et al* (2019). "Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems." *The Lancet*, 392, 10170, 447-492, [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)

**3.5:** Mason, Pamela & Tim Lang (2017). Sustainable Diets: How ecological nutrition can transform consumption and the food system. Abingdon: Routledge Earthscan ISBN: 978-0-415-74472-0 <https://www.routledge.com/Sustainable-Diets-How-Ecological-Nutrition-Can-Transform-Consumption-and/Mason-Lang/p/book/9780415744720>

**3.6:** Lang, T. (2020). Feeding Britain: Our Food Problems and How to Fix Them. London: Penguin Books. <https://www.penguin.co.uk/books/308/308380/feeding-britain/9780241442227.html>

#### **Research programmes and funding cited**

**3.7** Wageningen University, The Netherlands; Lang was PI for WP6, Policy Analysis. GLAMUR (Global and Local food chain Assessment: a MULTidimensional peRformance-based approach). EU 7th Framework Programme, ID: 311778. 1 February 2013 - 31 January 2016. €2.93m, City's grant was €228,585.

**3.8** Stockholm Resilience Centre, Sweden. EAT-Lancet Commission; Lang was an appointed Commissioner. Wellcome Trust (£3m) and the Stordalen Foundation (£3m). 2016-2019.

#### **4. Details of the impact** (indicative maximum 750 words)

Lang's research impact has had state, public, business, and civil society beneficiaries at multiple levels as illustrated below:

**4.1 Changing EU policy through civil society mechanisms.** Lang was an appointed expert to the European Economic and Social Committee (EESC), the formal EU mechanism that brings civil society perspectives into the work of the European Commission. The EESC's 'comprehensive food policy' approach helped shape and was cited in the EU's new *Farm to Fork Strategy* (May 2020), which forms part of the European Green Deal, a programme to make food systems fair, healthy and environmentally-friendly. The Rapporteur who led the EESC policy development described the result of Lang's contribution: "The EESC food policy work certainly contributed to creating the momentum for a more integrated approach to sustainable food in the EU, which resulted in the recent '*Farm to Fork Strategy*'". [5.1]. Earlier, Lang's research on multi-criteria food policy and sustainable diets was used in formulating two EESC Opinions on a 'comprehensive EU food policy' (adopted December 2017) and on 'healthy and sustainable diets' (adopted February 2019) [5.2]. The Rapporteur said "[Lang's] experience in integrated and sustainable food policy was invaluable in formulating these important position papers" [5.1] which ultimately provided the framework and strategic direction for the *Farm to Fork Strategy*. Another avenue of Lang's contribution to the *Farm to Fork Strategy* came through the EAT-Lancet report [3.4] which is cited as evidence (section 2.4, p.13) on facilitating the shift to healthy, sustainable diets.

#### **4.2 The EAT-Lancet Commission research [3.4] driving international sustainable food policy and private sector innovation.**

Lang's policy research in the global EAT-Lancet report was used as a basis for regional Nordic food systems transformation, embracing Finland, Sweden, Norway and Denmark. As a consultant for the Nordic Council of Ministers and the Nordic Food Lab, he helped develop sustainable diet policy for Nordic food security. Modelled on the EAT-Lancet report, the resulting baseline assessment set out policy actions Nordic countries could take to stay within planetary boundaries while promoting healthy diets [5.3]. These policy positions were also used as the basis for published public dietary advice to consumers in the Nordic region. At a country level, the EAT-Lancet research was used in the development of Norway's Action Plan on Sustainable Food Systems, which was launched at the UN General Assembly in September 2019, with the objective of ensuring greater food security through the development of sustainable food systems, including a focus on sustainable diets [5.4].

In October 2019, EAT formed a partnership with 14 cities from the global C40 Food Systems Network (made up of 96 cities in 51 countries as of May 2020) to commit to the C40 Good Food Cities Declaration which is aimed at supporting an increase in healthy food consumption based on the EAT-Lancet Commission's 'planetary diet' recommendations [5.5].

In the business sector, the Compass Group, the world's largest foodservice provider serving 4.5 billion meals a year, announced on 18 December 2019 that it was using the EAT-Lancet Commission research to improve health and decrease environmental impact in its foodservice operations, specifically decreasing meat use. To this end, Compass has partnered with EAT to

start a pilot project (ongoing) in its Nordic operations to track the carbon footprint of food it serves. The pilot focuses on lowering the amount of meat served and increasing the serving of vegetables, and training chefs to prepare lower-carbon dishes [5.6].

#### **4.3 Lang's research used to underpin urban food policy change globally**

Lang's research is supporting the implementation of the city-focussed Milan Urban Food Policy Pact (MUFPP), a non-binding agreement signed by City mayors globally since 2015 to develop sustainable and resilient urban food systems and change diets. The MUFPP sets out six core 'themes' for achieving sustainable urban food systems and 'sustainable diets' is one of these six objectives. In 2018, the UN Food and Agriculture Organisation (FAO) and MUFPP developed a framework of 44 indicators for monitoring and managing food system change [5.7a, p. 21]. Indicator 14 is designed to support activities that promote 'sustainable diets' and Lang's research [3.2, 3.5] is cited as underpinning resources [5.7b, p.2-3]. The draft indicators were agreed at the 2018 MUFPP Mayors' Summit and a methodological guide on collecting and analysing indicator data drafted by the FAO. The European Commission's 2019 'Food 2030' initiative adopts a food systems approach, with cities as a new type of food system partner and has linked the MUFPP indicators to its priorities [5.7c, p. 9]. At the MUFPP launch at Milan's World Expo 2015 involving over 100 cities, Lang represented the then Mayor of London, Boris Johnson, as an opening keynote speaker. By 2020 the pact had 209 international city signatories and an active good practice network. In October 2020, the London Food Board (which advises the Mayor of London and London Assembly on food issues) asked Lang to chair a new Sustainable Diets Working Party to collaborate with bodies across the UK to create practical urban sustainable diet strategies (ongoing).

#### **4.4 Lang's research cited by UK Parliamentary Select Committees**

Lang was an expert witness to the national House of Commons Environmental Audit Committee (EAC) inquiry (2018-2019) on the connection between human health and planetary health. Lang's evidence is quoted in the final report [5.8] in Section 4 on food systems (paragraphs 91, 102, 114, 121). Lang's evidence [drawing on 3.1-3.5] is reflected in the final recommendations where the role of sustainable diets is highlighted, such as the Committee's recommendations 15, 16, 18, and 20a [5.8]. On 21 May 2020 he was re-called by the EAC to give evidence, based on his work [3.6] for its exploratory hearing on the environmental implications of the Covid-19 pandemic.

In June 2019, six Select Committees of the House of Commons, in an unprecedented initiative, set up Climate Assembly UK a citizens' jury to understand public preferences and to make recommendations on how the UK should tackle climate change. Lang was the invited informant for the Assembly Panel on food, farming and land use and outlined his multicriteria 'model' for sustainable diets [3.5] for use by the Assembly. In its final report, presented to Parliament on 10 September 2020, the Assembly calls for food/diet changes that align with Lang's research on sustainable diets [5.9, pp.276-8; Lang referenced as informant, p.261]. The Chairs of the commissioning Select Committees subsequently wrote to the Prime Minister urging him to ensure that the Government acts on the Assembly's recommendations ahead of the UK hosting the UN Climate Change Conference (COP26) in November 2021.

#### **4.5 Feeding Britain research used by policy-makers for UK food security**

Since its publication in March 2020, the research and analysis in Lang's book *Feeding Britain* [3.6] has been extensively used by state, business, and civil society policy-makers involved in the future of the UK national food system in response to Brexit and the Covid-19 pandemic. Lang was asked to give briefings, based on the book's analysis, to MPs on the Environment, Food and Rural Affairs Committee (EFRA) about food system fragilities and policy priorities (16/3/20); to the Shadow food and farming minister (26/3/20); to the Food and Drink Federation (31/3/20); to Defra's Chief Scientist's team (2/4/20); and to a range of industry groups such as the UK horticultural sector and farming groups (private briefings, March/April 2020).

In 2019 the UK government invited Henry Dimbleby to lead an independent review to inform development of a National Food Strategy (NFS) which would set out policies for a future food system and a plan to achieve it. *Feeding Britain*, the EAT-Lancet report, and three other Lang publications feature in the selected reading of the NFS Part One Report (July 2020, p.98, 99, 104, 105), which makes recommendations to government, and Lang is also mentioned in the report's



acknowledgements (p. 5) [5.10]. NFS Part Two - the action plan – is expected in July 2021 and the Government has committed to a White Paper within six months.

Between March and July 2020, Lang's *Feeding Britain* research featured in national news and broadcast media (e.g. Guardian, Daily Mail, BBC national radio, Channel 4 news) and was picked up by international news agencies (Reuters, Press Association). Lang's interview for The Observer (22 March 2020) was shared 7903 times and the review by Simon Jenkins in the Sunday Times (22 March 2020) said: "Present discontents lend urgency to Lang's core message... Security matters, and that includes food security. Tim Lang has performed a public service" [5.11].

#### 5. Sources to corroborate the impact (indicative maximum of 10 references),

**5.1:** Testimonial from European Economic and Social Committee food policy working group Rapporteur and Administrator, 3 June 2020.

**5.2:** EESC (2017). *Civil society's contribution to the development of a comprehensive food policy in the EU (own-initiative opinion)*. Working Document NAT/711. Available at: <https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/civil-societys-contribution-development-comprehensive-food-policy-eu-own-initiative-opinion>

**5.3:** Stockholm Resilience Centre (2019). *Nordic Food Systems for Improved Health and Sustainability*. Stockholm: Stockholm University, Stockholm Resilience Centre. [https://www.stockholmresilience.org/download/18.8620dc61698d96b1901719b/1561012758207/7017%200054%20SRC\\_Report%20Nordic%20Food%20Systems\\_webb%20new%20June%2019.pdf](https://www.stockholmresilience.org/download/18.8620dc61698d96b1901719b/1561012758207/7017%200054%20SRC_Report%20Nordic%20Food%20Systems_webb%20new%20June%2019.pdf) (Accessed 24.2.21)

**5.4:** Norwegian Ministries (Sept 2019). *Food, People, and the Environment: The Government's action plan on sustainable food systems in the context of Norwegian foreign and development policy*. Oslo: Ministry of Foreign Affairs. (Accessed 24.2.21) Available at: <https://reliefweb.int/report/world/food-people-and-environment-government-s-action-plan-sustainable-food-systems-context>

**5.5:** About the C40 Good Food Cities Declaration (2020) Available at: <https://eatforum.org/initiatives/cities/eat-c40/> (Accessed 24.2.21)

**5.6:** Compass Group press release announcing their use of Eat-Lancet Commission report. 18 December 2019. Available at: <https://www.compass-group.com/en/media/news/2019/compass-group-joins-forces-with-eat-to-build-a-sustainable-food-.html> (Accessed 24.2.21)

**5.7a:** FAO/Milan Urban Food Policy Pact (July 2018). MUFPP framework of actions category: Sustainable diets and nutrition (Indicator 14). Available at: <https://milanpact.developx.it/wp-content/uploads/2018/08/Sustainable-diets-Indicator-14-Activities-to-promote-sustainable-diets-V3.pdf> (Accessed 24.2.21)

**5.7b:** FAO/MUFPP/RUAF (2019). The Milan Urban Food Policy Pact Monitoring Framework. Available at: <http://www.fao.org/3/ca6144en/CA6144EN.pdf> (Accessed 25.2.21)

**5.7c:** European Commission (2019) European cities leading in urban food systems transformation: connecting Milan & FOOD 2030. Available at: [https://ec.europa.eu/info/publications/european-cities-leading-urban-food-systems-transformation\\_en](https://ec.europa.eu/info/publications/european-cities-leading-urban-food-systems-transformation_en) (Accessed 25.2.21)

**5.8:** House of Commons (September 2019) *Our Planet, Our Health*. Environmental Audit Committee. HC1803. London: House of Commons. (Accessed 24.2.21) Available at: <https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/1803/180302.htm>

**5.9:** Climate Assembly UK (2020) *The Path to Net Zero*. Available at: <https://www.climateassembly.uk/report/> (Accessed 24.2.21)

**5.10:** Henry Dimbleby (July 2020) *National Food Strategy – Part One*. Available at: <https://www.nationalfoodstrategy.org/> (Accessed 24.2.21)

**5.11** Professor Tim Lang Media Coverage, March – July 2020 inclusive.