

<b>Institution: Cardiff University</b>		
<b>Unit of Assessment:</b> Geography and Environmental Studies (14)		
<b>Title of case study:</b> Establishing a new global policy framework for research and intervention on sustainable urban food		
<b>Period when the underpinning research was undertaken:</b> 2009-2019		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Roberta Sonnino	Professor	01/05/2003-present
<b>Period when the claimed impact occurred:</b> 2015-31/07/2020		
<b>Is this case study continued from a case study submitted in 2014? No</b>		
<b>1. Summary of the impact</b> (indicative maximum 100 words)		
<p>Sonnino's applied research on food systems shaped and established the first global policy framework for research and intervention on sustainable urban food. The research underpins the United Nations' Food and Agriculture Organisation's (UN FAO) 'Framework for the Urban Food Agenda' (a strategic document defining urban food systems as a new area of intervention and investment), which raised \$20M from donor-countries to support technical work on food and cities across eight countries. The research also informed the development and execution of a new €49M research and innovation agenda on urban food systems for the European Commission's Horizon 2020 programme across 28 member states.</p>		
<b>2. Underpinning research</b> (indicative maximum 500 words)		
<p>Over half the world's population lives in urban areas and this figure is expected to rise to 70% by 2050. Already urban dwellers consume up to 70% of available food supply, even in countries with large rural populations, and rapid urbanisation is increasingly threatening global food security and the ability of communities to have access to adequate food. Sonnino's interdisciplinary approach combines research on short supply chains, public procurement, food security and food governance to tackle this global issue.</p> <p>Building on the findings of an ESRC project on school meals (2005-2008) that highlighted the potential of city governments to reform food system dynamics <b>[G3.1, 3.1]</b>, in 2009 Sonnino proposed a new research and policy agenda on urban food, highlighting the role of cities as food system actors <b>[3.2]</b> – that is, the cities' potential to transform food systems through the use of policy tools that include far more than just urban agriculture. This article and underpinning research on the need to include urban, alongside rural, areas in food debates <b>[G3.1, 3.2]</b> provided the basis for two large projects funded by the European Commission, which have been instrumental in shaping a new urban food agenda <b>[G3.2, G3.3]</b>.</p> <p>Outputs from these projects (which saw Cardiff University lead work packages on urban food) include publications highlighting the importance of urban food governance and policy to deliver sustainable food security, pointing in particular to the relevance of policy instruments such as public procurement <b>[3.3]</b>, short supply chains <b>[3.4]</b> and land use planning in facilitating a holistic reform of urban food systems <b>[3.5]</b>.</p> <p>This work positioned Sonnino at the forefront of an emerging scientific agenda tackling urban food challenges. Since 2014, the research has been widely shared through invited presentations (in Austria, France, Germany, Italy, Spain, Sweden, Bulgaria, Belgium, Romania and the UK) by global networks and policy organisations, and keynote speeches at major policy events (2015 Signing Ceremony of the Milan Urban Food Policy Pact, 2016 Mayors' Summit at UN FAO headquarters and 2018 Zero Hunger event organised by the EC and UN FAO at the European Parliament).</p> <p>In 2016, Sonnino was the only academic invited as an expert advisor on the EU-funded project 'Innovation for a Sustainable and Healthy Production, Delivery and Consumption of Food in Cities' – coordinated by EUROCITIES (a network of government representatives from more</p>		

than 130 of Europe's largest cities) [G3.4]. Over nine months, Sonnino's scientific advice to a team of practitioners from EUROCITIES and the City of Milan helped them collect and analyse data from cities all over the world that were committed to reforming their food systems. The project recognised the important role of research and innovation funding in supporting the development of urban food systems, and made recommendations for the ways in which future funding in this area should be set up, including better coordination between different sources. This would help cities to rise to the challenges posed by food security [3.6].

Findings from the EUROCITIES project highlighted four emerging areas of innovation:

- **systems thinking** – the capacity by city governments to understand (and engage with) food as a complex system [3.1, 3.3, 3.4, 3.5];
- **enhanced civil society participation in food governance** – a conscious effort by city governments to create more inclusive and democratic food governance arenas [3.3, 3.4];
- **food policy integration** – the inclusion of food within other policy sectors and priorities (e.g. housing, transport, welfare, environment) [3.3];
- **progressive trans-local alliances between cities** – the emergence of global networks of cities that facilitate knowledge-exchange and dissemination of best practice around food [3.5].

The research also highlighted barriers faced by city governments while striving to reform their food systems, pointing in particular to their inability to understand and address social and environmental challenges that cut across multiple levels of governance [3.5].

These insights were very well received by the EU's Directorate General for Research and Innovation and by UN FAO; both offered an expert contract to Sonnino to shape and guide their work in the new field of urban food policy and planning.

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

[3.1] Morgan, K.J. and **Sonnino, R.** (2010) The Urban Foodscape: World Cities and the New Food Equation, *Cambridge Journal of Regions, Economy and Society*, 3: 209-224, DOI:10.1093/cjres/rsq007

[3.2] **Sonnino, R.** (2009) Feeding the City: Towards a New Research and Planning Agenda, *International Planning Studies*, 14 (4): 425-436, DOI:10.1080/13563471003642795

[3.3] **Sonnino, R.** (2019) The Cultural Dynamics of Urban Food Governance, *City, Culture and Society*, 16: 12-17, DOI:10.1016/j.ccs.2017.11.001

[3.4] **Sonnino, R.** (2016) The New Geography of Food Security: Exploring the Potential of Urban Food Strategies, *The Geographical Journal*, 182, 2: 190-200, DOI:10.1111/geoj.12129

[3.5] **Sonnino, R.**, Tegoni, C. and De Cunto, A. (2019) The Challenge of Systemic Food Change: Insights from Cities, *Cities*, 85: 110-116, DOI:10.1016/j.cities.2018.08.008

[3.6] De Cunto, A., Tegoni, C., **Sonnino, R.** and Michel, C. Mapping Innovative Urban Food Strategies Designed to Promote the Production, Delivery and Consumption of Sustainable and Healthy Foods. First Report of the project "Food in Cities: A Study of Innovation for Sustainable and Healthy Production, Delivery and Consumption of Food in Cities". Food 2030 (July 2017) 30-CE-0833121/00-49  
[https://ec.europa.eu/research/openvision/pdf/rise/food\\_in\\_cities.pdf](https://ec.europa.eu/research/openvision/pdf/rise/food_in_cities.pdf)

#### Selected grants:

[G3.1] Sonnino R., 'Delivering Sustainability: Towards the Creative Procurement of School Meals' (2005-2008). Economic and Social Research Council (RES-000-23-1095). £176,892.65.

[G3.2] Sonnino R., 'Urban, Peri-Urban and Regional Food Dynamics: Towards an Integrated and Territorial Approach to Food' (PUREFOOD, 2010-2014). Marie Curie Initial Training Network, Grant Agreement ID: 264719. €2,886,380.

**[G3.3]** Sonnino R., 'Knowledge Brokerage to Promote Sustainable Food Consumption and Production: Linking Scientists, Policy-makers and Civil Society Organisations' (FOODLINKS, 2011-2013). FP7 Small or Medium-Scale Focused Project, Grant Agreement ID: 265287. €1,495,263.

**[G3.4]** Sonnino R., 'Innovation for a Sustainable and Healthy Production, Delivery and Consumption of Food in Cities' (2016-2017). Framework Contract: 30-CE-0833121/0049. €60,000.

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

Sonnino's research influenced a new strategic approach for the United Nations' Food and Agriculture Organisation (UN FAO) and a new research and innovation agenda for the European Commission. This played a key role in supporting the development and implementation of innovative approaches to help local governments ensure that their food systems are inclusive and sustainable.

##### 4.1 Implementing a new UN strategic approach to food security and urban planning

Sonnino's research ensured that UN FAO's strategic approach to the challenges of urban food security could be resourced, developed and implemented globally. In 2017, she was awarded an expert contract (\$28,000) from UN FAO, following an internal analysis to identify "a good leader who could influence and guide what the FAO could do...across regions of the world" **[5.1]**. Sonnino was chosen for her "prestige as researcher" and "her relevant work on key issues of urban food security" **[5.1]**. For 18 months (2017-18), she led on writing the 'Framework for the Urban Food Agenda' – a high-level guide supporting local and national governments in tackling the complex food challenges created by urbanisation. Internal support was provided from all divisions of the organisation, but no other external expert was involved.

FAO's Strategic Programme Advisor and lead technical contributor to the Framework acknowledged the contribution of Sonnino's work: "*The Framework uses much of Professor Sonnino's research and it is specifically informed by three areas of her expertise: public food procurement, short food supply chains and systems planning/thinking*" **[5.1]**. The FAO Framework was launched in 2019 and translated into six languages. Through its overarching aims and its seven Comprehensive Areas of Support (CAS) designed to target UN intervention, the Framework provides pathways and funding to support local governments in their efforts to address urban food security and develop sustainable food systems **[5.2, 5.3]**.

The Framework signalled a change in thinking within the organisation. Karen Fabbri (Deputy Head of the Directorate General for Research and Innovation at the European Commission) confirms: "*her [Sonnino's] ground-breaking work with the Food and Agriculture Organisation...has played a substantial role in establishing sustainable urban food systems on the global policy agenda*" **[5.4, 5.3]**. In particular, the Framework's whole-systems approach commits UN FAO to support food system actors (e.g. traders, wholesalers, processors, street vendors) that were not often direct beneficiaries of policy intervention by the United Nations **[5.1]**. In addition to ensuring a cohesive approach to urban food systems, this approach facilitates inclusion and access to support for some of the most vulnerable individuals and small businesses. FAO's Strategic Programme Advisor stated: "*I enthusiastically and strongly support a positive assessment of the impact of the work Roberta has produced in the last few years, which, given her involvement in the urban food work FAO, can be considered as unprecedented*" **[5.1]**.

By the end of 2019, the seven CAS had attracted \$20M in funding from donor countries. UN FAO is investing these funds to facilitate the development of urban food systems in Tunisia, Bangladesh, Peru, Ecuador, Mexico, Costa Rica, Ukraine and Tanzania. FAO's Strategic Programme Advisor highlights the importance of the Framework in FAO's flagship Urban Food Systems Programme in Peru, where "*the Framework is being used constantly and with implementation of the CAS across the national territory*" **[5.1]**.

Take-up of Sonnino's research, via the Framework's integral role in the future development of UN policy, is demonstrated by how the Framework's key principles are embedded in the UN's thinking on urban food systems. UN staff training on its key principles took place at two

regional offices, at the Milan Urban Food Policy Pact's annual Mayors' gathering in France, at the 2020 World Urban Forum in Abu Dhabi and was planned at four regional offices by end of 2020 [5.5]. The legacy of Sonnino's systemic approach also continues to influence FAO policy-making by "*inspiring other processes in FAO's teams that were struggling to complete holistic documents*" [5.1]. For example, it is informing an entire section of the FAO's business portfolio, which includes six sub-programmes on urban food action [5.1]. The impact of Sonnino's work on the activities of UN FAO continues to unfold through her involvement in a new stream of work designed to strengthen the links between national and local governments for more effective intervention on global food security [5.1, 5.6].

#### 4.2 Identifying and implementing a new urban food agenda for the European Commission

Sonnino's research, particularly from the EUROCITIES project, was translated into policy briefings for the European Commission [5.7], and led to an invitation to join DG Research FOOD 2030's Expert Group, tasked with identifying a new research and innovation agenda for the European Union's Horizon Europe programme. Sonnino was Vice-Chair of the Expert Group, comprised of 12 academics from across Europe, representing a range of different fields and disciplines. Karen Fabbri, Deputy Head of the Directorate General for Research and Innovation, confirmed: "*Roberta's influence within the group and on its outcomes were important as she was the only academic advocating for the inclusion of urban food systems in the EU Research Framework programme*" [5.4].

Sonnino led on drafting the final report, which identifies urban food systems as a priority funding area for the next round of European research. Fabbri stated that Sonnino's research "*on enhanced civil society participation in food governance, food policy integration, and systems thinking meant that she provided a unique and valuable contribution to the discussions and outputs from the work*" [5.4]. These findings are present in the final FOOD 2030 report, which directly cites Sonnino when stating that public actors are developing an interest in food, nutrition and landscapes "given their contributions to healthy lifestyle, urban design and the quality of the retailing, green infrastructure and mobility systems in an urban area" [5.8, p.20].

The FOOD 2030 report also led to the European Commission releasing two new funding calls under the existing Framework Programme (Horizon 2020) [5.9]. Fabbri noted that these are already fostering alliances within and between cities, as well as "*supporting networks of cities to share best practices on sustainable, healthy and inclusive food systems*" [5.4].

The inaugural EC call for projects on citizen-driven food systems was launched in 2018 [5.9] and "*findings from Roberta's close collaboration with EUROCITIES were very influential in framing the scope and content of the call*" [5.4]. The call states that the impact of the funded projects should be to support [5.9]:

- intensified interactions between all actors in the food chain;
- increased participatory and citizen science initiatives in the area of food and nutrition security in cities.

The call allocated funding for a total of €15M for two projects, which will take place over 13 countries (Italy, Denmark, Belgium, France, Germany, Spain, Slovenia, Netherlands, UK, Poland, Sweden, Romania and Greece) between 2020 and 2023 [5.9].

Through an additional investment of €34M, a second funding call was launched in June 2019 to support the development of urban food policies across all 28 European member states. Fabbri stated that the call also echoes Sonnino's work through:

- an emphasis on participatory planning;
- the need for urban governments to co-design (with local stakeholders) more systemic food strategies, with funds used to support "*development of sustainable, healthy and inclusive food systems policies in city-regions, where system thinking, institutional innovation and participatory planning are at the core*" [5.4, 5.9].

Three projects were awarded in May 2020, including the €12M 'Building Pathways Toward FOOD 2030-led Urban Food Policies' (FOODTRAILS) project. Led by the City of Milan, the project has 19 partners, including Cardiff University (with Sonnino as overall scientific coordinator for the project), civil society organisations and an innovation agency. FOODTRAILS co-designs and co-implements sustainable urban food policies in 11 partner cities across nine European countries (Italy, France, UK, Denmark, Albania, Portugal, Greece, Poland and the Netherlands), as well as in 21 other cities in 13 countries beyond Europe (including Russia, the USA, Brazil, China, Australia and South Africa). Two other projects totalling nearly €26M have also been awarded (led by organisations in Italy and Spain), which will take place over 21 countries, including Iceland, Ireland, Greece, Cyprus and Romania [5.9].

Fabbri highlighted that: *"Her [Sonnino's] input has been invaluable in raising awareness, setting out the urgency and identifying co-benefits of urban food systems transformation through R&I policy, which has and will continue to enable European consortia and members to invest in research and innovation projects that can deliver real impact on the ground"* [5.4].

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

[5.1] Testimonial: Programme Advisor for UN Food and Agriculture Organisation (FAO) Urban Food Agenda

[5.2] UN Food and Agriculture Organisation (FAO) 'Framework for the Urban Food Agenda'

[5.3] UN Food and Agriculture Organisation (FAO)'s interview of Professor Sonnino used at events, including World Urban Forum

[5.4] Testimonial: Karen Fabbri, Deputy Head for the DG Research and Innovation of the European Commission

[5.5] Professor Sonnino's final keynote speech at the 2015 Signing Ceremony of the Milan Urban Food Policy Pact

[5.6] Professor Sonnino's keynote speech at formal International Consultation on FAO's Framework for the Urban Food Agenda at the FAO Headquarters (November 2019)

[5.7] *Research and Innovation Supporting the Farm to Fork Strategy of the European Commission*. Policy Brief, FIT4FOOD2030

[5.8] *Recipe for Change: An Agenda for a Climate-Smart and Sustainable Food System for a Healthy Europe*. Report of the High Level Independent Expert Group on FOOD 2030.

[5.9] European Commission calls and awarded projects: CE-SFS-24-2019 'Innovative and citizen-driven food systems approaches in cities' and CE-FNR-07-2020 'Food 2030: Empowering cities as agents of food systems transformation'