# Leeds Edible Schools Sustainability Network

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Food production and outdoor teaching area at Sharp Lane Primary School, Leeds Photo: Ian Dickinson

There is a growing interest in both urban agriculture and sustainability, as framed in terms of climate change, landscape, economic uncertainty and resource shortages, while issues involving child health and well-being are increasingly causing concern. Education is key, especially in terms of sustainability teaching and the production of food by schools on school premises.

The Leeds Edible Schools Sustainability Network (www.lessn. info) is, at this date, an un-constituted, informal group of organisations and academics, all based or active within the Leeds district, who share core values with regard to the wellbeing and sustainability agenda; and who are all, in various ways, involved in supporting educational establishments and related organisations in the growing (often on school premises) and consumption of local food, the promotion of resilient and healthy practices including outdoor work and teaching about healthy school food, and the development of effective education on topics concerning sustainability.

## Urban agriculture in the UK

It has been suggested that cities could become largely selfsufficient, at least for fruit and vegetables, by using concepts such as Continuous Productive Urban Landscapes (Viljoen and Bohn, 2008) and "urbalism" to maximise food production within the urban and periurban zones (Bliss, 2010). In the UK, a number of cities, including Brighton and Bristol, and towns such as Totnes and Todmorden are also now aiming to reduce their "food miles" (Lang and Paxton, 1994) down to "food yards" (Warhurst, 2013). These initiatives are achieving varying degrees of success. But are these ideas no more than utopianism in a country where food is currently cheap and readily available? Some would say so, but the rising costs of food and fuel, combined with static income, high unemployment and a tightening of the benefits system are already causing significant problems.

In 2012-2013, food banks in the UK fed ca. 350,000 people - of whom over 125,000 were children (Trussell Trust, 2013) - and many believe that the situation could deteriorate substantially in the near future. The former Chief Government Scientific Adviser, Sir John Beddington, suggested that the world is facing a "perfect storm of food shortages, scarce water and insufficient energy resources that will threaten to unleash public unrest, cross-border conflicts and mass migration as people flee from the worst affected regions" (Barclay, 2012).

Beddington argues strongly for a major increase in GM crops and, not surprisingly, the agri-tech industry concurs. But the

topicality of these techniques (not least the power they place in the hands of a few multinational companies), and resistance from environmental organisations for health and biodiversity reasons, must be weighed against the concomitant advantages of urban agriculture with its benefits to health, well-being, social, localising and entrepreneurial activities. (Leake et al. 2009).

So in the UK today, actors from all sectors of society – from research institutions, central and local government, NGOs, the business sector, local groups and organisations to families and individuals – are exploring different ways to develop viable urban agricultural systems.

# The role of education

Schools have a key role to play in educating children about food, food production, and the role of plants in the environment. They also may help them to achieve a healthy diet, to become fit and happy and, to an extent, to reach out to engage with these issues in the wider local community.

Many children are worryingly ignorant about food. Recent research by the British Nutrition Foundation among more than 27,500 school children found that 29% of primary school children believe that cheese comes from plants, and that 18% believe fish fingers come from chicken. Meanwhile, 10% of secondary school children believe that tomatoes grow under the ground (BNF 2013). There is even anecdotal evidence that some adults may be equally ill-informed.

Ignorance also extends to food growing, where expertise in the UK has declined significantly since the Dig for Victory campaign of WWII educated the civilian population in the cultivation of home-grown fruit and vegetables (Hay 1942). The project was considered a success, with 1,400,000 allotments (often newly made in parks and on public land) producing nearly a million tonnes of vegetables by 1943. Fruit and vegetables were never rationed, and the homegrowing of food contributed to substantial improvements in diets and eating habits (Medical News Today, 2013)

Today many children are very poorly nourished. The School Food Matters (2013) website reports that:

"92% of children consume more saturated fat than is recommended, 86% too much sugar, 72% too much salt, and 96% do not get enough fruit and vegetables. The UK now has the highest rate of obesity in Europe, with one in three children overweight or obese by year 6. Obesity in children under 11 has risen by over 40% in ten years. If this trend continues, half of children will be obese or overweight by 2020. The financial impact of obesity is estimated to become an additional £45 billion per year by 2050 with a seven-fold increase in NHS costs alone. Junk food diets are causing other health problems too. For example, type 2 diabetes – once known as "late onset" and traditionally found in the over-40s - is increasingly found in adolescents. A poor diet also has significant effects on children's behaviour, concentration and mood. Children with diets lacking in essential vitamins, minerals and essential fatty acids tend to perform worse academically, cannot concentrate and are more aggressive."

Meanwhile, food prices are rising, putting additional pressure on household budgets. Following a report by the restaurateurs Henry Dimbleby and John Vincent of the Leon chain, The National Department of Education has proposed that, from September 2014, the National Curriculum include cooking, growing and food education (School Food Plan, 2013). Secretary of State for Education Michael Gove suggested that pupils in Key Stages 1 to 3 should be taught practical knowledge, skills and crafts working in fields such as "horticulture: to cultivate plants for practical purposes, such as for food" (Proposed National Curriculum for Design and Technology 2013). If implemented, this is to be welcomed, but already it would appear that many schools are not only managing to grow food on school premises, sometimes in significant quantities (and occasionally even involving livestock), but also managing to teach this - and wider issues concerning sustainability – within the existing curriculum.

However, there appear to be many schools which are doing little or nothing – perhaps due to lack of opportunity for one reason or another, or through lack of will or interest, or due to some other cause. Anecdotal evidence suggests that, in the Leeds district, around 300 educational establishments may be involved in some activity (some of it significant or even exemplary), while a further 80 may not. It was the emergence of this disparity, which sparked the formation of the Leeds Edible Schools Sustainability Network (LESSN).

#### **Leeds Network**

To date, Leeds has not been at the forefront of these initiative, but neither has it been idle, as the track record of the LESSN partner organisations testifies. One of the key local players is Feed Leeds. This is a constituted group and network of more than 40 organisations (including local authority and university departments, food growing and volunteer projects and others) involved with sustainable local food in one way or another. Many partners are very active, and some genuinely innovative.

The initial idea for LESSN emerged from the work of Feed Leeds, "a network of individuals and organisations working in partnership to promote and support food growing in Leeds for its economic, social, environmental and health benefits" (www.feedleeds.org). Feed Leeds had noted that some schools in Leeds appeared to be exemplars in terms of food growing and sustainability, while others appeared to have achieved little to date.

With the assistance of the Leeds Sustainability Institute, research is ongoing to:

- 1) establish a baseline dataset on existing school practices, attitudes, ambitions and restrictions.
- 2) discover which strategies and approaches are bearing fruit (both from Leeds schools' experiences and from other sources).
- 3) Develop a set of tools which schools can utilise to improve their performance.

New relationships are currently being developed with the Food For Life Partnership (FFLP) and Leeds City Council (LCC) School Wellbeing Service to deliver workshops for teaching staff. It is hoped that, if successful, progress will be monitored and this research will feed into the above research objectives.

By sharing existing information, LESSN members identified 386 establishments to be included in the research. Of these, 186 schools have registered with the Campaign for School Gardening, 105 schools are listed as Leeds City Council Sustainable schools and 6 schools have livestock. However, 79 schools do not appear to have engaged in any related activity to date. The data is stored and includes (where available): head teacher contact details, gardener/grower contact details, and notes on growing activity at the school. The schools are also indicate on the LESSN web map available on the website (www.lessn.info).

#### Curriculum, consumption and beyond

The LESSN, FFLP and LCC workshops target both the new curriculum and the new school meal arrangements. Essentially, LESSN and FFLP will be filling the gap that LCC is not currently equipped to provide – mainly the food-growing element – by delivering workshops for staff on how to start and nurture fruit and vegetable growing schemes, how best to incorporate this activity into both the curriculum and the wider school culture, how to maximise education and leadership as regards healthy eating, and how to benefit from teaching and working outdoors.

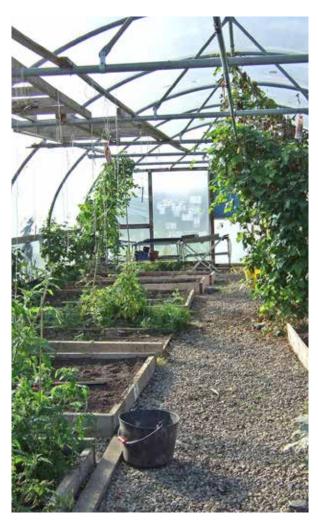
The intention is, by example (driven by the enthusiasm of students) and by direct engagement with parents/guardians, to reach beyond the school gates into the local community in order to help promote local food growing, cooking and consumption in the home.

### Future

LESSN continues its research to develop a growing picture of the situation and monitor change as the project progresses. The network will work with the FFLP and Leeds City Council School Wellbeing Service to help provide curriculumfocussed teaching tools and advice and to engage further with expert partners, schools, school teams and schoolcentred communities.

In spite of its ad hoc formation and informal process, at this stage LESSN would appear to be a success, although there is still much to be achieved. The chief constraints remain lack of time available to work on the project, very limited funding, and difficulties making contact with the most informed people within school teams. LESSN continues to work to resolve these issues as best it can.

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Polytunnel food production at Farsley Farfield Primary School, Leeds Photo: Ian Dickinson

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