

Technical Appendix 6: Urban Land for Food Production

It has proved impossible to retrieve reliable national statistics on potentially productive urban land. However some estimates can be made. The Department of Communities and Local Government refers to 'urban green space' (Dunnett *et al.*, 2002). They divide this up into several categories:

- 'Amenity' including parks and gardens
- 'Functional' including farm land, allotments, institutional grounds
- 'Semi-natural' including woods, grassland, heaths
- 'Linear' including transport corridors, railway land, canal banks.

Although there are many competing uses for this land, there is potential for food production in all these classes, combined with many other simultaneous functions. Our assumption is that if carbon prices and certain food prices are high, there will be stronger pressures to produce certain kinds of food more locally, and many producers, both amateur and professional, will find it economically advantageous.

In terms of actual areas, statistical sources give divergent figures on account of different conventions and the shifting definition of 'urban' (DCLG, 2007). Total urban area estimates range from about 2,000 kilohectares on a very strict definition, to about 3,500 kilohectares on administrative definitions. The Countryside Agency (2005) describes an area 'in and around towns' of 2.6 million hectares. Within this it is not easy to identify what is narrowly 'urban'. Natural England states that "only a third of London is urban" (Natural England, 2008). London might well be a special case, but if this is true across all urban areas there could be around 2 million hectares of 'non-urban urban space'. Davies *et al.* (2009) estimate the total area of urban domestic gardens at 433,000 hectares. Gaston *et al.* (2005) report about 23% of the total urban areas of Sheffield and Leicester to be domestic gardens. If all urban areas had the same proportion it would amount to between 450,000 and 800,000ha, depending on definition. According to the CPRE (1994) 5% of urban land was 'vacant' in the early 90s: this is about 190,000 hectares. These estimates do not cover all the categories in the DCLG classification, which could in principle provide more. In most official figures for land types there is a significant remnant called 'other land' that appears to be mostly urban. This is variously estimated at 300-700 thousand hectares.

On the basis of such indirect data we estimate that up to 1 million hectares of potentially food-productive land exists within the boundaries of towns and cities, although it would not be either possible or desirable to use it all. We postulate that somewhat under 400,000 hectares could become available for food production, combined with other simultaneous uses. Some of this would be intensive/commercial and extremely productive. It would take advantage of the decarbonised energy supply and waste heat from CHP systems, and possibly CO₂ streams.

Some of this food production would have leisure, recreational or educational qualities, particularly with respect to livestock. It is anticipated there will be a very large expansion of the city farm principle, with multifunctional land-uses and intensive livestock rearing (Whitfield, 1987).

We believe that the cultural value of greater involvement with food production on a semi-hobby basis will be increasingly recognised, with a concomitant increase in allotments, city farms, and cultivated

areas of parks, playing fields and institutional gardens (Garnett, 1996). These will synergise with, rather than oppose, the recreational aspects of public open spaces (Skerratt and Williams, 2008).

References

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